INFOSTAT – INSTITUTE OF INFORMATICS AND STATISTICS **Demographic Research Centre**

Population in Slovakia 2006

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Analytical publication, which assesses the population development in the Slovak Republic for the recent time period focusing on the years 2005 - 2006. The publication covers the assessment of all aspects of the reproductive process including the international comparison.

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CONTENTS

Introduction	5
1. Marriage	7
2. Divorce	13
3. Fertility	19
4. Abortion	29
5. Mortality	35
6. Migration	47
7. Total population and population growth	57
8. Population age structure	61
9. International comparison	67
Conclusion	75
Literature	77

INTRODUCTION

The latest publication of the Demographic Research Centre entitled "Population Development in the Slovak Republic 2006" is a follow-up publication to the ones released in the previous years. The analysis deals with the population development in Slovakia during the period 1990 - 2006 and the focus is on situation in the recent years 2005 and 2006. Recuperation processes, which are linked to the trends of the 1990s, have started during the recent period and the new post-transformation trends have emerged.

The "Population Development in the Slovak Republic in 2006" is a complex analytical publication setting a base for the detailed evaluation of the up-to-date demographic situation in Slovakia. The complexity of the publication is expressed by the description of all demographic processes as well as in the detailed view applied in the analyses.

Analyses of each demographic process are the main parts of the publication. Data and facts – chronological strings of the main analytical demographic indicators – are essential to the publication.

As usual, a separate chapter deals with each demographic process. As it was already stated, the focus is on the period after 1990 and references to the previous era are made only if the context is required in the analysis. The publication does not contain regional aspects of the population development in Slovakia as it deals with the demographic situation on the country level. A separate chapter is devoted to the international comparison of demographic trends within the EU 27.

Regarding the temporal aspect, all the published indicators cover the period 1990 - 2006. Graphs display the indicators since 1980 in order to compare the analysed period to the model of reproduction which was predominant before the year 1990. However, the era before the political turnover is not commented upon. The international comparison includes data for the EU 27 member states in 1995 and 2003, which enables for the comparison of the situation in these countries at the beginning and at the end of the observed period.

A vast majority of the data on the Slovak Republic, which are displayed in the graph and tables, come from the Statistical Office of the Slovak Republic and the source of these data is not indicated below the tables. The data source is indicated only in case the data come from a different source than the Statistical Office of the Slovak Republic.

The publication is meant primarily for the people in various domains of the public life who are interested in the population matters: starting from the public servants and ending with scholars and researchers. It is also meant for those who simply seek information about the current population developments in Slovakia, and who are not experts in demography.

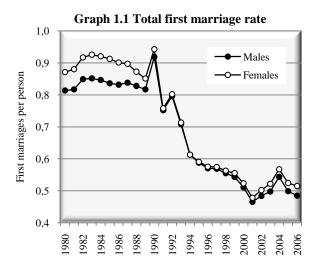
The print of the publication "Population Development in the Slovak Republic in 2006" is limited. The publication was released in two language mutations: Slovak and English. It is free of charge and it is being distributed among the government institutions, state institutions, research institutes, universities and media with an intention to guarantee sufficient information among the experts and wide public. The print of the English mutation serves in presenting the population trends in Slovakia abroad so that the information can be made use of in the cross-national studies, projects and comparisons. Both language mutations are online in full-text at the webpage of the Demographic Research Centre (www.infostat.sk/vdc).

Tab. 1.1 The main marriage	e mulcator	5								
		1990	1995	2000	2001	2002	2003	2004	2005	2006
Marriages		40 433	27 489	25 903	23 795	25 062	26 002	27 885	26 149	25 939
Total first marriage rate	Males	0,919	0,588	0,5108	0,465	0,484	0,498	0,543	0,498	0,485
	Females	0,942	0,590	0,524	0,478	0,502	0,522	0,567	0,525	0,515
Mean age at first marriage	Males	24,20*	24,71	26,41	26,63	27,12	27,53	27,90	28,57	28,84
	Females	21,80*	22,31	23,867	24,13	24,58	24,99	25,33	25,91	26,24
Mean age at marriage	Males	38,78*	39,58	41,26	41,91	42,07	42,33	42,74	43,05	43,23
of higher order	Females	34,88*	36,25	36,96	37,83	37,76	38,32	38,78	38,58	39,08
First marriages in %	Males	89,5	89,4	87,9	87,2	86,6	86,4	88,5	86,8	85,2
	Females	90,9	91,2	89,7	89,1	88,7	88,9	90,0	88,5	87,5

Tab. 1.1 The main marriage indicators

*Year 1992

After marriage had decreased to the historically lowest level in 2001, the intensity of marriage increased. However, the increase lasted three years only (2002 - 2004) and the intensity of marriage decreased again in 2005 and 2006. A particularly

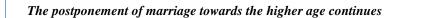


sharp decline occurred in 2005 and the level of nuptiality dropped below the values recorded in 2004. In 2006, the number of marriages and marriage rates dropped even below the levels recorded in 2003 and they approached the historically lowest values. The number of marriages has decreased by 1946 (7.0 %) until 2006. The decrease was more pronounced among men. Total first marriage rate decreased by 10.7 % among men and by 9.2 % among women. It is the greatest difference in marriage between men and women since 1990.

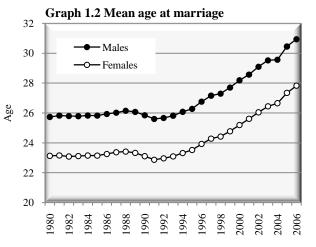
The number of marriages nears the historical minimum while the population at risk of marriage is increasing. More than 90 % of men entering into marriage are aged 20 to 44. The age range is slightly lower for women (16 to 39). The share of population at risk of marriage is approximately 22 % of the total population at age 20 to 44 and 16 to 39 respectively. Low utilization of marriage potential is manifested in the low marriage rates. The difference is apparent if the current marriage indicators are compared to those recorded in the 1980s. For example,

in 1980 the population at risk of marriage was 60 % less the current number; however, the number of marriages was 56 % higher.

	1990		1995		2000		2006	
		%		%	t	%		%
				Males				
20-24	135 899	5,24	172 443	6,60	211 189	8,04	213 408	8,15
25-29	66 603	2,57	72 982	2,79	116 326	4,43	168 488	6,44
30-34	47 412	1,83	48 694	1,86	57 852	2,20	95 784	3,66
35-39	38 993	1,50	42 902	1,64	47 904	1,82	56 155	2,14
40-44	28 019	1,08	38 272	1,46	44 961	1,71	50 752	1,94
20-44	316 926	12,21	375 293	14,36	478 232	18,21	584 587	22,33
Total	2 595 913		2 613 712		2 626 061		2 618 284	
				Females	5			
15-19	201 835	7,43	223 358	8,11	213 379	7,69	193 687	6,98
20-24	79 354	2,92	119 743	4,35	166 828	6,01	184 891	6,66
25-29	39 757	1,46	45 757	1,66	80 154	2,89	123 361	4,44
30-34	35 359	1,30	35 505	1,29	43 191	1,56	69 956	2,52
35-39	37 480	1,38	36 984	1,34	39 944	1,44	46 554	1,68
15-39	393 785	14,51	461 347	16,75	543 496	19,57	618 449	22,28
Total	2 714 798		2 754 078		2 776 486		2 775 353	



The changing behaviour of the population regarding marriage, which is a component of the transforming reproductive behaviour, is expressed in the increasing mean age at marriage. The postponement of marriage towards higher age is the main reason of the current low marriage intensity. Another, although probably not as substantial, reason of the low marriage level is a refusal of marriage as a form of a living arrangement by part of the population. It is also likely that a proportion of the population at risk of marriage would not find a suitable partner later in life and this would result in low marriage rates in the future as well. It is also possible that another part of the population will not be willing to change their life style and enter marriage



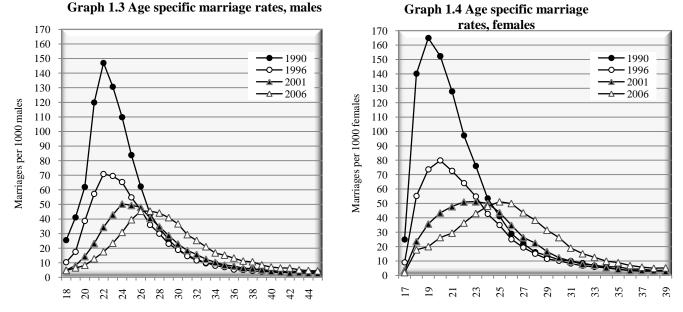
which can result in spreading cohabitation or increasing number of singles. The mean age at marriage has been increasing since the beginning of the 1990s. The trend is in a strong contrast to the

beginning of the 1990s. The trend is in a strong contrast to the previously well established model of early marriage. The age at marriage increases roughly equally among men and women. The difference in the mean age at marriage of men and women is about 3 years in the long-term.

During the period 1990 to 2006, the mean age at marriage increased by 5.1 years among men (19.7 %) and by 4,7 years among women (20.4 %). The increase was particularly intense in 2005 and 2006. Within 2004 to 2006 the mean age at marriage increased by 1,4 years for men (4.6 %) and by 1,2 years for women (4.4 %). In 2006 the indicator reached the highest ever recorded values of 31 years for men and almost 28 years for women.

The age of highest intensity of marriage has shifted into the higher age for both sexes and the peak in the intensity of marriage is ever less pronounced. In 2006, the highest age-specific marriage rate was at age 27 for men and at age 25 for women.

The intensity of marriage among men has been highest in the age group 25 - 29 since the late 1990s. Marriage rates used to be highest for men aged 20 - 24 until the mid-1990s. Since 2005 we can find higher marriage rates of men in the age group 30 - 34 compared to the age group 20 - 24. These shifts clearly demonstrate the postponement of marriage. The intensity of marriage at age 20 - 24 decreased by 83 % since 1990. A remarkable decrease of 36 % occurred during the period 2004 – 2006. A similar pace of decline has not been recorded in any other age group. In contrast, marriage rates of men aged 30 - 34 years doubled compared to 1990 and the most significant increase has been recorded since2004 (10.9 %).



Women used to experience the highest rates of marriage at age 20 - 24. The most significant changes in marriage of women have been taking place during the recent period. In 2005 the highest intensity of marriage shifted into the age 25 - 29. The intensity of marriage decrease the most within 19 years of age (decline in 86.7 % comparing 1990 and 2006 and in 26.6 % comparing 2006 to 2004). In contrast, the intensity of marriage doubled among women aged 30 - 34 since 1990. It increased in 26.2 % since 2004.

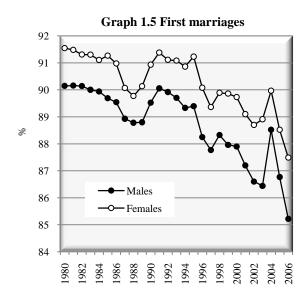
Tab. 1.3 Age-specific marriage rates by sex (per 1000 persons)

	1990	1995	2000	2001	2002	2003	2004	2005	2006
					Males				
15-19	12,8	6,8	3,2	2,7	2,5	2,3	3,4	2,5	2,3
20-24	113,4	65,0	39,5	33,1	30,5	28,5	29,2	22,0	18,6
25-29	49,8	36,2	42,6	40,7	43,5	45,2	47,3	44,1	43,0
30-34	13,1	11,6	16,4	16,0	18,7	20,9	23,6	24,6	26,2
35-39	6,1	5,1	6,7	6,6	8,0	9,0	9,7	10,8	11,8
40-44	4,1	2,8	3,4	3,3	4,0	4,6	4,6	5,3	5,9
45-49	3,2	2,4	2,6	2,3	2,7	2,6	2,9	3,4	3,4
50-54	2,0	1,6	2,1	2,0	2,0	2,3	2,2	2,3	2,5
55-59	1,6	1,3	1,6	1,4	1,6	1,9	1,9	2,0	1,9
					Females				
15-19	62,6	32,3	15,6	13,0	12,1	10,2	11,4	8,7	8,3
20-24	101,2	64,7	55,2	48,7	48,0	48,3	48,9	41,1	36,7
25-29	24,4	19,4	29,8	29,3	34,0	37,5	41,6	41,5	42,8
30-34	8,4	6,2	8,4	8,6	10,2	11,7	13,3	15,9	16,8
35-39	4,3	2,9	3,7	3,5	4,0	4,6	5,3	5,6	6,4
40-44	2,8	2,0	2,0	2,2	2,4	2,5	2,7	2,7	3,1
45-49	2,0	1,5	1,7	1,8	1,8	1,8	1,9	2,0	2,1
50-54	1,5	1,0	1,2	1,0	1,2	1,3	1,4	1,4	1,6
55-59	0,8	0,7	0,6	0,6	0,7	0,8	1,0	1,0	1,1

Trends in marriage of persons aged 35 and older support the postponement of marriage into higher age hypothesis. The share of marriage rates at age 35+ on the total marriage rate was mere 9 % among men in 1990 and 5.5 % among women in the same calendar year. In 2006 the proportion increased to 23.2 % among men (160 % increase) and to 12.0 % among women (120 % increase).

Total number of marriage largely depends on the first marriage

The total marriage rate is sensitive to the changes in first marriage. Although the share of first marriage on the total number of marriages has been decreasing, it still is above 85 %. Trends in first marriage largely influence trends in total marriage: when the proportion of first marriage decreases, the total marriage rate usually decreases and vice-versa. This was the case also after the year 2001 when the decrease in marriage that latest for more than 20 years stopped. Similarly, the decreasing proportion of first marriage affected the declining marriage rates after 2004. The decrease in the proportion of first marriage was remarkable in 2005 and 2006 and it resulted in the historically lowest values in 2006 (82.5 % of first marriages for men out of



all marriages and 87.5 % for women respectively).

The share of mutually first marriages reached historically lowest value in 2006 as well. For the first time it decreased below 80 %. The second most frequent combination are repeated marriages of men and first marriages of women (7.9 %) and the third combination are repeated marriages of both partners (6.8 %).

Second marriages strongly prevail in re-marriage. In 2006, marriages of the third and higher order contributed only 1 % to total number of marriages of men and by 0.8 % to the total number of marriages of women.

Trend in the repeated marriage differs to the first marriage trend for both men and women. The first marriage rate has been decreasing since 1990 (with an exception of the period 2002-2004) and the intensity of the repeated marriage has been fluctuating. Due to low number of the repeated marriage it is difficult to tell the exact tendency. Total repeated marriage rate was historically highest in 2006. However, the overall intensity was low in comparison to first marriage. Thus, the repeated marriage cannot compensate the decrease in the first marriage and it does not influence the total marriage rate significantly.

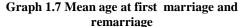
Tab. 1.4 Marriages by marital status

Tab. 1.4 Marriages by marria	1990	1995	2000	2001	2002	2003	2004	2005	2006
Total marriages	40 435	27 489	25 903	23 795	25 062	26 002	27 885	26 149	25 939
8				Mutual	ly first marri	iages			
Marriages	34 517	23 503	21 592	19 631	20 474	21 183	23 475	21 314	20 637
Proportion from total	85,4	85,5	83,4	82,5	81,7	81,5	84,2	81,5	79,6
			Marriages	of single man	and widowe	d or divorced	l woman		
Marriages	1 682	1 068	1 176	1 116	1 234	1 294	1 208	1 376	1 469
Proportion from total	4,2	3,9	4,5	4,7	4,9	5,0	4,3	5,3	5,7
			Marriages of	of divorced o	r widowed m	an and single	e woman		
Marriages	2 252	1 575	1 651	1 567	1 764	1 419	1 612	1 834	2 057
Proportion from total	5,6	5,7	6,4	6,6	7,0	5,5	5,8	7,0	7,9
				Mutu	ally remarria	ges			
Marriages	1 984	1 343	1 484	1 481	1 590	2 106	1 590	1 625	1 776
Proportion from total	4,9	4,9	5,7	6,2	6,3	8,1	5,7	6,2	6,8

Average number of first marriages per person

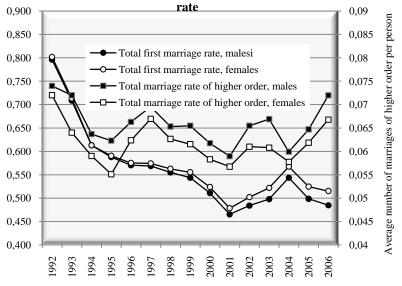
Mean age at marriage is increasing irrespective of marriage order. The average duration since the previous marriage does not change significantly, so the increasing mean age at marriage is caused by the postponement of first marriage towards higher age. The mean age at re-marriage has been increasing during a longer period of time. The difference between sexes remains unchanged and it is more pronounced at re-marriage than at first marriage. During the period 1995 - 2006, the mean age at first marriage increased by 4.1 years among men and in 3.9 years among women. The increase of mean age at repeated marriage was a bit slower: + 3.7 years among men and +2.8 years by women.

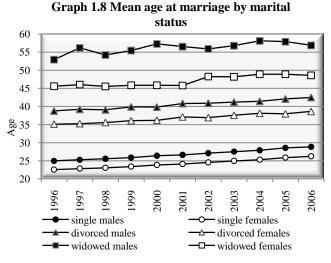
First marriage rates are highest among men aged 25 - 29 and among women aged 20 - 24 since 2000. In case of re-marriage, the highest rates are recorded at age 35 - 39 years for men and at age 30 - 34 for women.





Graph 1.6 Total first marriage rate and total remarriage





Divorced persons most frequently enter into re-marriage and the proportion of the widowed is very low. In 2006, 94.8 % of re-marrying grooms and 95.5 % of the re-marrying brides were divorced.

Speaking of the mean age at entering marriage, single persons dominate at lowest age, followed by divorced at higher age and widowed persons display the highest mean age at marriage. The age pattern fully corresponds to the logic of the family cycle and the life course. The mean at age at marriage increases depending on the marital status for both men and women. However, men keep having higher age at marriage compared to women at any marital status. Divorce and widowhood are being shifted towards the higher age due to the postponement of first marriage and the increasing duration of divorced marriage. Also a prolonging lifespan plays a role as it influences a potential of re-marrying.

	1990	1995	2000	2001	2002	2003	2004	2005	2006
					Single males				
15-19	12,9	6,8	3,2	2,7	2,5	2,3	3,4	2,5	2,3
20-24	112,1	64,5	39,2	32,9	30,4	28,4	29,1	22,0	18,6
25-29	45,7	33,7	40,6	39,0	41,8	43,6	46,0	42,9	42,1
30-34	8,9	8,6	13,1	12,9	15,2	17,3	20,5	21,3	22,8
35-39	2,6	2,7	4,1	3,8	4,7	5,4	6,5	7,3	7,6
40-44	1,0	0,8	1,3	1,2	1,6	2,0	2,3	2,6	2,5
45-49	0,6	0,4	0,6	0,5	0,5	0,6	1,0	1,1	1,0
				S	ingle females				
15-19	65,5	32,3	15,6	13,0	12,1	10,1	11,4	8,7	8,3
20-24	98,6	63,4	54,3	48,1	47,3	47,7	48,4	40,7	36,3
25-29	19,9	16,4	26,8	26,6	31,2	34,9	39,3	39,0	40,6
30-34	4,7	4,0	5,4	5,7	7,0	8,5	10,2	12,2	13,2
35-39	1,7	1,2	1,7	1,4	1,7	2,1	2,8	3,1	3,3
40-44	0,8	0,5	0,5	0,5	0,7	0,6	0,9	0,9	0,9
45-49	0,3	0,3	0,3	0,3	0,3	0,3	0,5	0,5	0,5
				Divorceo	l and widowed	males			
15-19	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
20-24	1,3	0,6	0,2	0,2	0,2	0,1	0,1	0,1	0,1
25-29	4,1	2,6	2,0	1,7	1,6	1,6	1,4	1,1	1,0
30-34	4,1	3,0	3,4	3,1	3,4	3,6	3,1	3,3	3,3
35-39	3,5	2,4	2,6	2,9	3,3	3,5	3,2	3,5	4,2
40-44	3,1	2,0	2,1	2,1	2,4	2,6	2,3	2,7	3,4
45-49	2,6	1,9	2,0	1,8	2,2	2,0	1,9	2,2	2,4
				Divorced	and widowed f	emales			
15-19	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
20-24	2,6	1,3	0,8	0,6	0,6	0,5	0,4	0,4	0,4
25-29	4,5	3,0	3,1	2,6	2,8	2,6	2,4	2,5	2,2
30-34	3,7	2,3	2,9	2,9	3,2	3,2	3,2	3,7	3,7
35-39	2,6	1,7	2,0	2,1	2,3	2,4	2,5	2,5	3,1
40-44	2,0	1,5	1,5	1,6	1,7	1,9	1,7	1,8	2,3
45-49	1,8	1,2	1,4	1,5	1,5	1,5	1,3	1,5	1,7

Tab. 1.5 Age specific marriage rates by marital status

Spouses are most likely to have same level of education

Spreading higher education within the population is reflected also in marriage by educational level of spouses. While in 1990 10.9 % of men and 13.9 % of women entered marriage being elementary educated, the proportion has decreased to 7.2 % by men and 8.7 % by women until 2006. Changes in educational level of persons getting married are influenced also by the postponement of marriage, which is often closely connected to the achievement of higher education.

Marriages of spouses having identical educational level at marriage prevail among couples and their proportion on the total number of marriages is increasing. In 2006 more than 61 % of men and women had the same attained education at marriage. If spouses have different educational level at marriage, women tend to have higher education than their partners. In 2006, women had higher education than their partners in 22.8 % of marriages and in 15.6 % of marriages men had higher educational level. In 4 % of marriages the difference between the educational level of spouses considered 2 educational levels and also in this group women more frequently married less educated partners (in 60 % of the cases woman had higher degree).

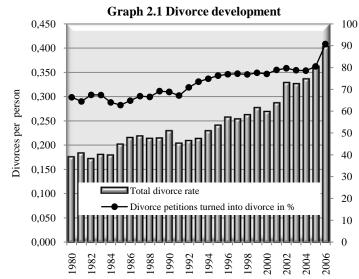
			Education of	f woman	
	Total	Elementary	Secondary without leaving exam	Secondary with leaving exam	University
Education of man					
Total	25 939	2 254	3 764	13 547	6 374
Elementary	1 857	1 364	278	197	18
Secondary without leaving exam	6 035	565	2 252	2 838	380
Secondary with leaving exam	12 231	298	1 129	8 591	2 213
University	5 816	27	105	1 921	3 763

Tab. 2.1 The main divorce indicators

	1990	1995	2000	2001	2002	2003	2004	2005	2006
Divorces	8867	8 978	9 273	9 817	10 960	10 716	10 889	11553	12716
Divorce petitions turned into divorce (%)	68,8	76,3	77,1	78,9	79,7	78,8	78,6	80,5	90,8
Total divorce rate	0,229	0,241	0,269	0,287	0,328	0,326	0,336	0,361	0,402
Mean age at divorce - males	36,30	36,47	38,15	38,56	38,53	38,88	39,31	39,60	40,00
Mean age at divorce - females	33,70	33,89	35,66	36,08	36,00	36,33	36,74	36,90	37,20
Average duration of marriage	10,70	11,19	12,73	13,12	13,06	13,34	13,59	14,40	14,70
Divorce with under aged children (%)	74,3	75,5	70,2	70,1	70,2	69,7	67,3	65,9	66,6

The long-term increase in the number and level of divorce even accelerated in 2005 and 2006. Total number of divorces exceeded 11.5 thousand in 2005 (increase in 664 cases compared to 2004, in 6.1 % respectively) and in 2006 it reached 12.7 thousand cases (increase in 1163 cases compared to 2005, in 10.1 % respectively).

%



The historically highest number of divorces is mirrored in the highest divorce rates. For the first time in the history, the total divorce rate exceeded 40 % in 2006, which means that 40 out of 100 marriages end up in divorce. The divorce rate increased in 7.4 % in 2005 and in 11.4 % in 2006 compared to the previous year. Taking into account a development during the latest 25 years, the increase in divorce rate similar to the one 2006 was recorded in 2002 only.

The upswing in divorce recorded in 2006 was not a response to the changing legislation, since no such changes occurred. Neither the changing behaviour of the population with respect to divorce was driving the rapid increase. Most likely, the main reason was a rapid increase in the proportion of the divorce petitions resulting in divorce. The proportion of the divorce applications turned into divorce has been increasing in the long-run, however, no major swings in the proportion have been recorded until 2005 and the increase was

gradual. In 2005, the proportion of divorce petitions turned into divorce exceeded 80 % and in 2006 even 90 %. We can speak of an unprecedented increase in 2006 and the degree of the increase fully responds to the increase in the divorce rate. The reasons for such development lay in the judicial practice: either in the increasing effectiveness of the courts or in the changing attitudes of judges regarding the decision to divorce a marriage.

Divorce immediately after the wedding is declining, however, divorce increases among the longstanding marriages

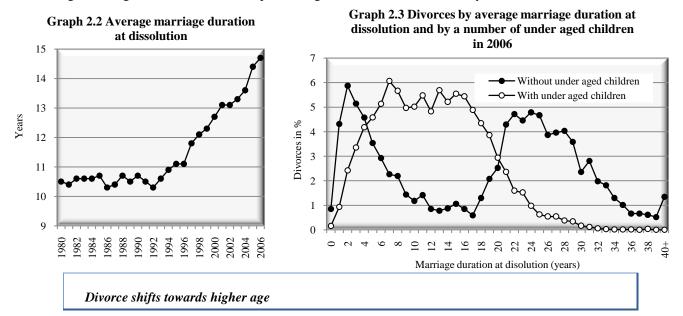
The average duration of marriage at divorce has increased since 1991. In the 1970s and 1980s most marriages divorced in duration of 10 to 11 years while currently it is after 15 years. The duration of divorcing marriage increased in 4.5 years (43 %) during 1992 - 2006.

The increasing duration of marriage at divorce is a result of the decreasing divorce immediately after the wedding and of an increasing disruption of the long-standing marriages. In 1990, 12.7 % of marriages lasting up to 2 years divorced and divorced marriages lasting at least 25 years contributed 6.7 %. In contrast, only 6 % of the divorced marriages lasted up to 2 years in 2006 while 13.6 % of divorced marriages lasted 25 or more years.

The decreasing divorce immediately after stepping into marriage is presumably linked to the increasing age at first marriage. Marriages entered in an early age, and often provoked by bride's pregnancy, set certain predispositions for less stability and consequently higher divorce rate early after the wedding (Pilinská 2005).

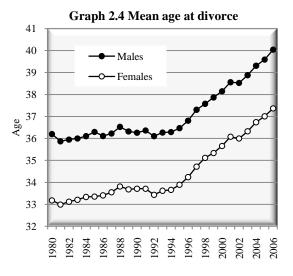
Number of children in families and their age largely influence marital disruption and the timing of divorce. In general, couples with young children are less likely to divorce compared to the couples with older children or childless couples. Divorce rates of marriages having under aged children is highest during the 6^{th} to 16^{th} year of marriage duration, which means that couples having small children in the first years of marriage are less likely to divorce as well. In contrast, marriages without

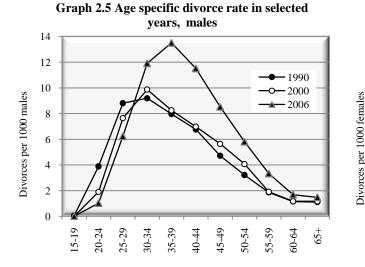
under aged children are more likely to divorce within 2 years or after 20 years of the marriage duration. In the first case, child-less marriages are fragile; in the latter case couples having adult children are more likely to divorce.



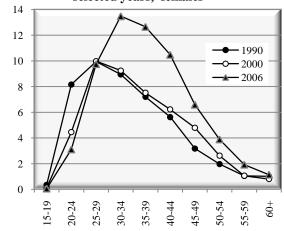
The age at divorce was unchanged until the beginning of the 1990s and it has been increasing ever since. The increasing age at divorce is caused by the increasing age at marriage and the prolonging average duration of divorcing marriage. Among divorcing men, the mean age at divorce has increased in 4 years during 1992 - 2006 and it has exceeded age 40. Among women, the mean age at divorce has increased to 37.3 years. The difference in the mean age at divorce of about 3 years is a result of the difference in the mean age at marriage.

The age at which the divorce rate is highest shifts towards more advanced age among both men and women. Men experience high divorce risk at age 30 - 44, and since 2006 divorce rate is highest among 35 - 39 year olds. Women experience highest divorce rates during the same age interval, however, the age distribution is slightly different compared to men and the highest divorce rates are among 30 - 34 year old women.





Graph 2.6 Age specific divorce rate in selected years, females



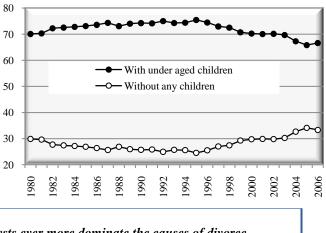
Tab. 2.2 Age specific divorce rate by sex (1000 persons)

	1990	1995	2000	2001	2002	2003	2004	2005	2006
					Males				
15-19	0,07	0,05	0,01	0,02	0,02	0,01	0,04	0,01	0,02
20-24	3,89	3,46	1,91	1,64	1,69	1,44	1,28	1,04	1,04
25-29	8,82	9,30	7,65	7,71	8,35	7,37	6,65	6,33	6,24
30-34	9,20	9,19	9,88	10,24	11,26	11,03	11,06	11,83	11,92
35-39	7,97	8,12	8,25	8,95	10,63	10,56	10,77	11,56	13,52
40-44	6,77	6,75	6,99	7,94	8,81	8,92	9,22	9,95	11,53
45-49	4,72	5,05	5,65	6,28	6,90	6,87	7,07	7,78	8,54
50-54	3,22	2,76	4,07	4,28	4,48	4,50	4,82	5,18	5,82
55-59	1,87	1,56	1,91	2,34	2,74	2,57	2,77	2,96	3,34
60-64	1,16	0,84	1,18	1,12	1,12	1,22	1,45	1,49	1,70
65+	1,12	0,97	1,17	1,20	1,17	1,13	1,22	1,09	1,49
					Females				
15-19	0,35	0,29	0,12	0,12	0,10	0,09	0,08	0,05	0,06
20-24	8,17	7,29	4,46	4,15	4,61	3,91	3,60	3,19	3,11
25-29	9,95	10,35	9,99	9,81	11,03	10,01	9,60	9,82	9,76
30-34	8,96	8,90	9,25	10,25	11,23	11,57	11,77	12,23	13,49
35-39	7,21	7,41	7,52	8,66	9,77	9,66	9,63	10,85	12,67
40-44	5,63	5,79	6,23	6,91	7,70	7,91	8,36	8,82	10,49
45-49	3,18	3,50	4,80	4,87	5,49	5,21	5,52	6,37	6,59
50-54	1,97	1,71	2,63	3,01	2,97	3,18	3,32	3,59	3,89
55-59	1,05	0,77	1,06	1,21	1,51	1,45	1,55	1,50	1,92
60+	1,01	0,65	0,80	0,83	0,74	0,80	0,95	0,92	1,15

The number of under aged children directly affected by divorce decreases

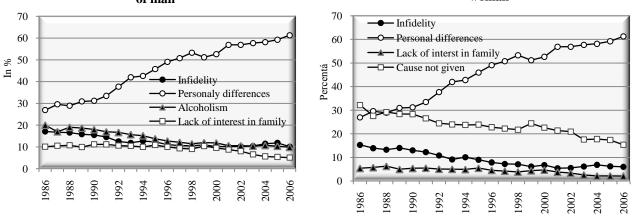
Until the mid-1990s, over 70 % of the divorcing families had under aged children. Since the second half of the 1990s, the proportion of these families has been decreasing. The lowest proportion of 65.9 % was recorded in 2005. The trend is primarily caused by the postponement of childbearing and by the decreasing fertility. Families have less children and the proportion of first children born in the third year of marriage and later has been increasing. In 1996, an average divorcing marriage had 1.17 under aged children, while in 2006 it was only 1 under aged child per 1 divorce.

Graph 2.7 Divorces by children



Differences in personality, opinion and interests ever more dominate the causes of divorce

Е



Graph 2.8 Divorces by main cause in side of man

Graph 2.9 Divorces by main cause in side of woman

Tab. 2.3 Divorces by cause in 2006

	Divorces total				С	ause io	on side of w	oman			
Cause on side of man	totai	1	2	3	4	5	6	7	8	9	0
Divorces total	12 716	281	149	767	268	19	7 796	38	57	1 391	1 950
1 over-hasty marriage	281	281	0	0	0	0	0	0	0	0	0
2 alcoholism	1 255	0	71	76	13	4	0	3	0	344	744
3 infidelity	1 292	0	13	218	21	2	0	7	0	378	653
4 lack of interest in the family	653	0	5	35	145	0	0	6	0	151	311
5 ill-treatment	225	0	1	14	7	11	0	0	0	46	146
6 personal differences	7 796	0	0	0	0	0	7 796	0	0	0	0
7 health reasons	19	0	1	3	0	0	0	0	0	5	10
8 sexual incompatibility	57	0	0	0	0	0	0	0	57	0	0
9 other causes	833	0	29	214	38	0	0	9	0	457	86
0 court did not find the fault	305	0	29	207	44	2	0	13	0	10	0

Causes of divorce display a stable trend since the 1980s. A majority of divorce is attributed to differences in personality, opinion and interests. The proportion of this cause of divorce is increasing and in 2006 it exceeded 60 %. The proportion of all other causes of divorce is declining, although the proportion of divorces caused by infidelity (both sexes) and alcoholism (of men) remains unchanged since 2000.

The proportion of divorce with the same cause on the side of women and men is increasing as a result of the rising proportion of divorce attributed to differences in personality, opinion and interests. In 1996, 61.9 % of divorce had the same cause on the side of wife and the husband while it increased to 71.1 % in 2006. Ever less divorce is caused by one of the partners (a drop from 26.4 % in 1996 to 17.7 % in 2006). Men are more frequently responsible for marital disruption (in 85 %) in cases only one of the partners was found responsible and the trend is stable over time.

Men who claimed an over-hasty marriage to marry the cause of divorce had the lowest mean age at divorce in 2006 (34 years). The highest mean age at divorce was recorded among men whose marital disruption was caused by alcoholism (42.7 years). The situation is similar among women: women who claimed an over-hasty marriage to marry were youngest at divorce (30.6 years) and oldest were women whose marriage failed due to alcoholism (40.5). The above mentioned trends are not changing over time.

	Divorces total					Cause on si	de of man				
	totai	1	2	3	4	5	6	7	8	9	0
Total	12 716	281	1 255	1 292	653	225	7 796	19	57	833	305
of which age:											
-19	1	0	0	0	0	0	1	0	0	0	0
20-24	236	25	14	22	18	5	136	0	1	9	6
25-29	1 494	82	61	166	86	22	936	2	10	87	42
30-34	2 651	76	175	282	145	44	1 687	2	9	166	65
35-39	2 479	47	230	244	128	45	1 541	5	11	171	57
40-44	2 202	17	276	243	94	45	1 325	5	5	136	56
45-49	1 680	15	245	159	74	33	986	1	11	118	38
50-54	1 143	11	164	114	62	17	666	2	6	84	17
55-59	526	4	62	39	32	10	321	1	1	41	15
60-64	181	0	21	18	8	3	112	0	1	13	5
65+	123	4	7	5	6	1	85	1	2	8	4
Mean age	40,04	34,02	42,72	39,44	39,48	40,14	39,91	42,13	40,59	40,69	39,42
Under aged children:											
0	4 242	122	423	406	197	45	2 624	10	29	294	92
1	4 968	120	408	460	259	82	3 180	6	20	313	120
2	2 945	34	337	357	167	80	1 700	2	7	188	73
3	449	5	67	57	18	14	235	1	1	34	17
4+	112	0	20	12	12	4	57	0	0	4	3
Average number	1,00	0,72	1,10	1,08	1,07	1,34	0,97	0,68	0,65	0,97	1,08

Tab. 2.4 Divorces by cause, age and under aged children - males

	Divorces total				С	ause on sid	e of woman				
		1	2	3	4	5	6	7	8	9	0
Total	12 716	281	149	767	268	19	7 796	38	57	1 391	1 950
of which age:											
-19	12	5	0	0	0	0	6	1	0	0	0
20-24	678	57	1	50	13	2	409	0	3	45	98
25-29	2 246	107	14	193	42	1	1 412	6	17	219	235
30-34	2 908	57	24	193	55	3	1 863	10	10	276	417
35-39	2 276	19	39	137	48	6	1 391	3	7	251	375
40-44	1 996	16	30	103	34	3	1 1 89	6	8	262	345
45-49	1 307	9	23	53	34	2	762	4	7	166	247
50-54	803	5	11	30	20	0	467	4	3	114	149
55-59	337	3	5	7	12	1	204	4	2	37	62
60-64	101	2	2	1	8	0	58	0	0	15	15
65+	52	1	0	0	2	1	35	0	0	6	7
Mean age	37,37	30,62	40,48	34,82	39,09	39,39	37,18	39,34	36,41	38,66	38,70
Under aged children:											
0	4 242	122	50	189	115	9	2 624	24	29	469	611
1	4 968	120	58	319	88	2	3 180	9	20	509	663
2	2 945	34	30	214	51	7	1 700	4	7	339	559
3	449	5	10	33	9	1	235	0	1	64	91
4+	112	0	1	12	5	0	57	1	0	10	26
Average number	1,00	0,72	1,03	1,17	0,90	1,00	0,97	0,55	0,65	1,03	1,11

Partners whose marriage collapsed as a result of sexual or health problems had on average least children according to 2006 data. Most children were in divorcing marriages caused by ill-treatment and infidelity. In this case the trend displays variations over time.

 Tab. 3.1 The main fertility indicators

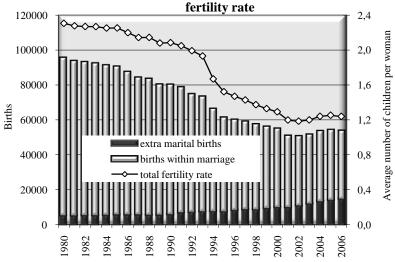
·	1990	1995	2000	2001	2002	2003	2004	2005	2006
	1990	1995	2000	2001	2002	2005	2004	2005	2000
Births	80 390	61 668	55 366	51 343	51 035	51 930	53 958	54 625	54 122
Live births	79 989	61 427	55 151	51 136	50 841	51 713	53 747	54 430	53 904
Stillbirths	401	241	215	207	194	217	211	195	218
Extra-marital live births	6 085	7 747	10 069	10 105	10 984	12 073	13 319	14 136	14 820
Extra-marital live births in %	7,6	12,6	18,3	19,8	21,6	23,3	24,8	26,0	27,5
Total fertility rate	2,085	1,523	1,292	1,198	1,185	1,199	1,241	1,253	1,239
Net reproduction rate	0,993	0,73	0,625	0,566	0,569	0,575	0,594	0,601	0,596
Mean age at childbearing	25,11	25,64	26,59	26,83	27,02	27,26	27,45	27,70	27,91
Mean age at first birth	22,66	23,01	24,16	24,35	24,72	25,01	25,35	25,69	25,95

The main trends in fertility – the postponement of childbearing and the increasing proportion of extra-martial births – have continued in 2005 and 2006. The number of births has increased to 54 thousand after the minimum of 51 thousand was recorded in 2001 - 2002. In 1990 the number of births was at about 80 thousand. The trend reversal in fertility in 2003 was pronounced in both the number of births and in increasing average number of children per woman (total fertility rate). However,

the upswing of fertility lasted only until 2005 and it slowed down in 2006 despite the expected gradual increase in fertility rates. The reason for the drop in fertility in 2006 is probably the decrease in nuptiality, which was recorded in 2005 and 2006 (see the chapter Nuptiality). Still about 75 % of children are being born into marriage in Slovakia and, hence, the trends in nuptiality significantly influence fertility. In 2004 the intensity of nuptiality increased which was mirrored in the rise of the total fertility rate in 2005; however, fertility rates in 2006 are clearly affected by the decreasing intensity of stepping into first marriage in 2005 and 2006.

The total fertility rate remains deep below the replacement level. The net reproduction rate, which expresses the replacement of the cohorts of potential mothers within the population, is 40 % lower than 1, which is a value at which cohorts of the current mothers are fully replaced by the daughters.

Graph 3.1 Change in the number of births and in total



Three phases can be distinguished in fertility trends during the period 1990 - 2006: in 1990 - 1995 a rapid drop in number of births and total fertility rate from 2.09 to 1.52 children per woman in reproductive age occurred; at a lower pace decreasing fertility indicators until the historical minimum of 1.19 children per woman was reached in 2002; and finally a slight upswing in the number of births and in total fertility rate has followed (to about 1.24 children per woman). Despite the trend revers al, Slovakia remains a lowest-low fertility country (total fertility rate below 1.3 children per woman; Billari, Kohler, Ortega 2002) and a country with one of the lowest total fertility rate within Europe. Billari, Kohler and Ortega (ibid) relate the emergence of the lowest-low fertility to the changing timing of childbearing; namely to the shifts from the early towards the later childbearing. Late childbearing is typical for the western European countries.

Postponement of childbearing into higher age continues

The postponement of childbearing is evident from the rising mean ages of mothers at birth: in 2006 the mean age of mother at childbirth increased to 27.9 years and the mean age of mother at first birth to 26 years. Similarly, the median age (age up to which 50 % of births occurred in a given year) has increased from 24.2 to 27.9 years during 1990 – 2006. The growth in the mean age at first birth was more dynamic compared to the mean age at childbearing. The mean age at first birth increased in 3.3 years during 1990 – 2006, while the most intense prolongation of (+1.8 years) occurred during the past 7

years. A rapid growth of the timing indicators signifies the transition towards the new reproductive model, the nature of which becomes clearer during the last several years.

The drop of fertility rates was pronounced in all age categories in 1990 - 1995. Afterwards, the age-specific fertility rates started to increase among women aged 30+ and this trend has been clearly visible since 2000. Age-specific fertility rates of women aged 30-34 increased in 39 % between 2000 and 2006 and among women aged 35+ the rates increased slightly less in 35 %. The proportion of women aged 35 to 49 years on the total fertility rate was only 4.3 % in 1990; however, in 2006 the value reached 10 %. The change is even more pronounced in case of women aged 30+ and these women contributed 35 % to the total fertility rate in 2006. It means that currently more than 1/3 of children are being born to mothers older than 29 years. The increase of fertility rates among women aged 30+ is not surprising. The trend relates to the transformation of reproductive behaviour and it is expected to continue in the future.

In 2005 the expected trend of gradually increasing fertility rates of women aged 25+ continued and the total fertility rated reached 1.25 children per woman. The age-specific fertility rates of women aged 20-24 were still slightly decreasing in 2006 as it was assumed, however, the unexpected drop occurred also among 25-29 year old women. In the latter age group the age-specific fertility rates were increasing in 2003-5. Most likely the deviation in the trend will only be temporary since it is expected to be related to the drop in nuptiality rates in 2005 and 2006. Women aged 25 to 29 years currently have highest fertility rates and in case the fertility decline would persist among them the expected recuperation would stop and the total fertility rate would remain at the very low level.

		Age-specif	ic fertility r	ates (‰)		Sha	re of age gro	ups on the 2	TFR (%)		TED
	15-19	20-24	25-29	30-34	35+	15-19	20-24	25-29	30+	35+	TFR
1990	242,0	936,5	582,6	234,2	89,4	11,6	44,9	27,9	15,5	4,3	2,085
1995	161,7	622,9	453,6	200,0	83,9	10,6	40,9	29,8	18,7	5,5	1,522
2000	118,2	420,6	438,3	220,2	94,6	9,1	32,5	33,9	24,4	7,3	1,292
2001	104,7	365,4	419,0	216,1	92,3	8,7	30,5	35,0	23,9	7,7	1,198
2002	104,4	340,6	415,3	227,6	96,4	8,8	28,7	35,1	27,0	8,1	1,185
2003	100,6	322,5	425,5	248,0	102,3	8,4	26,9	35,5	29,6	8,5	1,199
2004	99,0	324,0	436,2	268,5	112,6	8,0	26,1	35,2	31,8	9,1	1,241
2005	98,7	304,3	440,1	288,3	121,0	7,9	24,3	35,1	33,0	9,7	1,253
2006	99,0	282,6	422,6	306,9	127,7	8,0	22,8	34,1	34,7	10,3	1,239
		C	hange in %								Change in %
Index 1995/1990	-33	-33	-22	-15	-6						-27
Index 2000/1995	-27	-32	-3	10	13						-15
Index 2006/2000	-16	-33	-4	39	35						-4
Index 2006-1990	-59	-70	-27	31	43						-41

Tab. 3.2 Indicators of period fertility quantum

Tab. 3.3 Selected indicators of period fertility tempo

	Mean age at	Mean age at	% of	completed of	childbearing	(age in yea	rs)	Difference ((in years)
	childbearing	first birth	50%	10%	25%	75%	90%	90 - 10 %	75 - 25 %
1990	25,11	22,66	24,22	19,75	21,51	27,83	31,90	12,2	6,3
1995	25,64	23,01	24,81	19,89	21,83	28,61	32,78	12,9	6,8
2000	26,59	24,16	26,07	20,16	22,69	29,89	33,86	13,7	7,2
2001	26,83	24,35	26,39	20,27	22,97	30,16	34,05	13,8	7,2
2002	27,02	24,72	26,65	20,26	23,09	30,45	34,28	14,0	7,4
2003	27,26	25,01	26,99	20,37	23,37	30,74	34,48	14,1	7,4
2004	27,45	25,35	27,22	20,47	23,51	30,96	34,69	14,2	7,5
2005	27,70	25,69	27,60	20,57	23,78	31,29	34,90	14,3	7,5
2006	27,91	25,95	27,91	20,54	23,93	31,61	35,13	14,6	7,7
Difference 1995-1990	0,53	0,35	0,59	0,14	0,32	0,79	0,88	0,74	0,47
Difference 2000-1995	0,96	1,15	1,26	0,28	0,87	1,27	1,08	0,80	0,41
Difference 2006-2000	1,32	1,79	1,84	0,38	1,24	1,73	1,27	0,89	0,49
Difference 2006-1990	2,80	3,29	3,68	0,80	2,42	3,79	3,22	2,43	1,36

The low fertility is caused to a large degree by the postponement of childbearing. In case this explanation holds a rising fertility trends should follow and the stagnation of the total fertility rate at the current very low level is only temporary. The recuperation of fertility rates is expected to take place as the new model of reproductive behaviour gets clearly pronounced. The drop in fertility in 2006 suggests that the situation is more complex and the steady growth in fertility is not as straightfor-

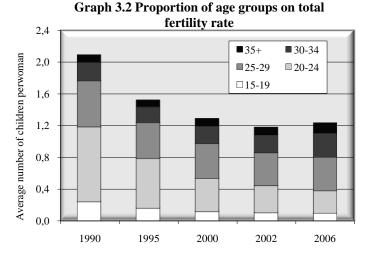
ward as it has been expected. Frejka and Sardon (2004) argued that despite the postponement of childbearing is the main cause of the rapid drop and persisting low fertility in the post-socialist countries, the consequence of such development will be low completed fertility¹ of the cohorts of women born in the mid-1970s. The delayed childbearing will not result in mere shifts in fertility rates, but it will have impact the fertility quantum as well.

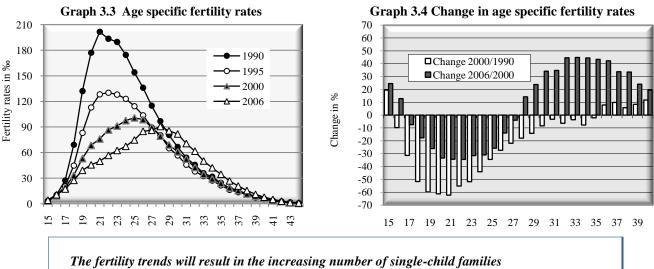
The variety of reproductive strategies increases

The postponement of childbearing has resulted in a considerable transformation of the age-pattern of fertility between 1990 and 2006. At the beginning of the 1990s, highest fertility was recorded among 20 - 24 year olds with a clearly pronounced peak in age 21 - 22. Fertility of women aged 30+ contributed to the total fertility rate only 15.5 %. Childbearing was concentrated into a narrow age interval. Due to the postponement of motherhood into higher age, the fertility rates decreased particularly among the younger women. Age-specific fertility rates decreased in 70 % among 20 - 24 year olds during 1990 – 2006. Among 25 - 29 the drop was milder (- 27 %), it was most intense during 1990 – 95 (-22 %) and afterwards the rates stabilised.

Age-specific fertility rates show more even distribution and since the beginning of the 1990s the upper age limit at which women commonly step into motherhood or terminate childbearing have been increasing. During the so-called Eastern

European model of an early and high childbearing (Kučera and Fialová 1996, Rychtaříková 1996), which was predominant still in 1990, women gave birth to 90 % of their children within age 31,9 years and the first motherhood was unusual among women older than 27,4 years. The age at which women give birth to 90 % of their children has prolonged to 35.1 % years until 2006. Also, the age interval at which women most frequently become mothers has extended in three years: in 1990 age range of 20.1 to 24.4 years was the most common for birth of the first child while it has shifted and prolonged to 22.1 to 29.4 years until 2006. The indicators of variability, presented in table 3.3, show that family formation does not follow a universal pattern and that the only uniform pattern of childbearing does not exist anymore as it used to be the case before 1990. The increasing variability of reproductive strategies emerged in a response to the differentiation of life-style orientations and newly emerged opportunities after 1990.





Reproductive strategies of women differ particularly in timing of first birth and, hence, stepping into motherhood does not follow a universal model. The highest fertility rates of the first birth order have shifted from age of about 20 years to 25 - 28 years since the early 1990s. However, the reproductive strategy of delayed childbearing is not universal, although predominant,

¹ Completed fertility rate is an average number of children born to women of the same birth cohort at the end of their reproductive age, i.e. at age 50. Similarly to the total fertility rate, values under 2.1 result in population decrease since the number of children born to women is not sufficient to substitute the original cohort. Women born in Slovakia within the cohort 1965 show completed fertility rate higher than 2.0 children per woman (Potančoková 2004).

and a proportion of women bear children in a lower age still. It is likely that although the postponement of childbearing will continue, the mean age of mother at first birth will shift even closer towards 30 years and this reproductive strategy will become the most usual, the early motherhood will still remain a typical strategy for a certain subpopulation of women, who are more family-oriented, have lower education and income. For those women the opportunity costs of childbearing related to the interruption of the professional career are lower compared to other women.

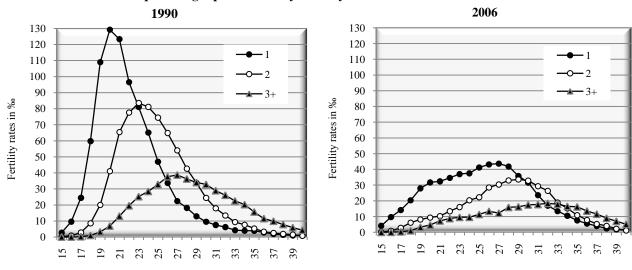
Postponement of the first birth translates into postponement of higher parity children as the increasing mean ages at births of second and higher parity children show. The distribution of age and parity-specific undergoes a transformation. The risk of infertility and unplanned childlessness increases with age and the high age at first birth may result in a lower number of children than the partners intended to have.

The changes in timing of childbearing affected trends in total fertility rate according to birth order. An average number of first children per woman has been decreasing until 2001, in case of higher birth orders the decrease lasted until 2002. The total fertility rate of the first birth order has been increasing since 2001 (+12 %), however, the trends are more problematic in case of the second (+ 3 %) and higher birth orders (+1 %). Moreover, the fertility drop in 2006 appeared among second and higher birth orders while in case of the first birth the previous increase merely halted.

Birth order	1990	1995	2000	2001	2002	2003	2004	2005	2006
				To	tal fertility rate	e			
Total	2,085	1,523	1,292	1,198	1,185	1,199	1,241	1,253	1,239
First	0,878	0,630	0,570	0,514	0,524	0,535	0,570	0,575	0,576
Second	0,738	0,524	0,416	0,391	0,381	0,384	0,386	0,396	0,391
Third +	0,469	0,368	0,307	0,293	0,280	0,281	0,285	0,283	0,273
				Mean	n age at childbi	rth			
Total	25,11	25,64	26,59	26,83	27,02	27,26	27,45	27,70	27,91
First	22,66	23,01	24,16	24,35	24,72	25,01	25,35	25,69	25,95
Second	25,41	25,92	27,04	27,25	27,49	27,78	28,03	28,27	28,61
Third +	29,24	29,72	30,52	30,64	30,67	30,85	30,86	30,99	31,05

Tab. 3.4 Total fertility rate and mean age at childbearing by birth order

The intensity of fertility of the first birth order will most likely keep increasing since the data suggest that the "catchingup" of the previously postponed births has already started. A partial recuperation is apparent only in case of first births so far and the intensity of fertility remains low among higher birth orders. The current trends in fertility will result, on the one hand, in more prevalent childlessness which is expected to increase to 17 - 20 % in cohorts of women born during the late 1970s (compared to about 10 % of childless among cohorts 1950 – 1960) (Sobotka 2004). On the other hand, the proportion of women having a single child will double to about 30 % in cohorts 1976 – 1980 according to the trend projection based on parity progression ratios (Potančoková, Vaňo, Pilinská, Jurčová, in print). The proportion of women having three and more children, as well as fertility rates of higher birth orders, had been decreasing already before 1990 and this trend has been continuing. It is expected that the above mentioned changes will translate into transformation of the family size. Until the beginning of the 1990s a two-child family model was largely predominant in the population (45 % of women had exactly 2 children). In the future increasing number of single-child families is expected..



Graph 3.5 Age specific fertility rates by birth order

Fertility of married women increases slowly while the proportion of never-married women in reproductive age keeps rising

The decreasing proportion of married women and the rising proportion of never-married women in all age groups is significantly influencing the fertility decline. The proportion of never-married women increases due to the postponement of marriage, which results in low intensity of marriage. Despite the proportion of extra-marital births has been increasing, as well as the fertility rates of never-married women, the childbearing is still strongly linked to marriage. Lowering proportion of married women in population is one of the factors behind the low fertility. The proportion of unmarried women (single, divorced or widowed) has increased the most among 20 - 24 year olds (57 % of married in 1990 compared to mere 16 % in 2006) and among 25 - 29 year olds (a drop from 80 % to 48 % between 1990 and 2006). The explanation lays in ever increasing proportion of never-married women within age 30 as well as in the increasing proportion of divorced women particularly after age 30 (see chapter Divorce for details). Until 1998 fertility rates of married women decreased in all age groups and the decrease was most pronounced among 20 - 24 year old married women. Fertility rates have been increasing among married 25 - 39 year old women since 2001. The trends largely support the postponement of childbearing hypothesis.

Tab. 3.5 Age	e specific	fertility	rate by	marital	status

Age	1990	1995	2000	2001	2002	2003	2004	2005	2006
			I	Proportion of m	arried women i	n % (1.7.)			
15-19	6,7	3,8	2,0	1,8	1,6	1,3	1,2	1,1	1,0
20-24	56,6	44,3	29,5	27,0	24,5	21,9	19,6	17,5	15,7
25-29	79,5	74,8	64,1	62,7	60,3	57,2	53,9	50,9	47,9
30-34	82,8	81,6	76,8	76,5	75,6	74,1	72,4	70,8	69,1
35-39	82,5	81,9	79,6	79,3	78,6	77,6	76,6	75,8	74,8
40-44	81,6	80,1	78,8	78,8	78,4	77,9	77,2	76,5	75,7
			Age-specifi	ic marital fertil	ity rates (per 10	00 married wo	men)		
15-19	511,7	544,4	521,6	452,7	434,4	430,5	475,8	500,0	484,8
20-24	314,4	247,4	233,9	213,7	210,9	211,7	228,9	226,7	224,9
25-29	140,6	112,4	123,2	118,9	120,3	127,8	136,2	143,0	143,1
30-34	52,8	44,6	50,2	49,5	52,8	58,4	63,2	68,9	73,9
35-39	16,5	14,9	16,9	16,4	17,2	18,2	19,6	21,8	23,0
40-44	2,9	2,9	3,0	3,1	3,0	3,2	3,8	3,6	3,7
			Age-specific ex	tra-marital fert	ility rates (per 1	1000 unmarried	l women)		
15-19	11,1	12,1	16,4	15,9	16,8	17,6	17,6	17,5	18,2
20-24	22,7	21,9	21,3	21,1	22,0	23,6	25,0	25,7	25,3
25-29	24,7	26,8	26,6	25,6	27,2	28,3	30,0	31,1	30,8
30-34	17,8	19,9	23,4	23,1	24,9	27,3	32,2	33,5	35,6
35-39	8,6	9,4	11,8	11,5	12,3	13,1	15,3	16,5	18,9
40-44	2,1	2,5	2,7	2,3	2,8	2,7	3,4	3,5	3,5
		Age-sp	ecific fertility ra	ates of never-ma	arried women (J	per 1000 never-	married womer	ı)	
15-19		12,0	16,4	15,9	16,8	17,6	17,6	17,5	18,2
20-24		21,2	20,8	20,8	21,7	23,3	24,7	25,5	25,1
25-29		24,0	24,2	23,8	25,3	26,7	28,4	29,1	29,5
30-34		19,1	20,9	22,1	23,5	26,4	31,5	32,7	35,8
35-39		8,2	10,4	11,2	11,7	12,7	15,4	17,9	20,0
40-44		2,9	1,8	2,3	2,3	2,3	3,5	3,8	3,6

Note: The age structure of female population by marital status since 2001 was estimated by the Demographic Research Centre

Approximately 40 % of the children born into marriage are of the first parity. Since 1990 the proportion of marital third and higher parity children decreased from 15 to 12 %. The decline has translated into decreasing fertility rates. Among married women, fertility rates of the second birth order decreased among 20 - 29 year olds and increased among women aged 30 - 34. In case of first births, the drop was most apparent among 15 - 24 year old married women, while the increase occurred among women aged 25 and older. Again, shifts in marital fertility rates of first and second birth order are influenced by the postponement of marriage and childbearing.

In contrast to marital fertility, fertility rates have slightly increased among never-married and unmarried women. Again, the increase considers mainly 25 to 39 year old women. However, despite the fertility of unmarried women is rising it cannot result in a considerable increase in the total fertility rate. Fertility rates of unmarried women are substantially lower than of the married women and they would have to at least double in order to compensate for the decline in marital fertility.

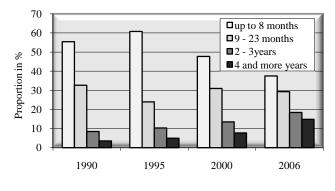
Tab. 3.6 Age-specific marital fertility rates by birth order

	1990	1995	2000	2001	2002	2003	2004	2005	2006
				1	First order				
15-19	443,7	483,8	451,3	394,6	368,9	362,1	398,3	405,5	393,9
20-24	165,1	137,7	149,0	133,6	133,2	134,3	149,4	144,2	141,3
25-29	31,0	27,3	44,6	45,1	48,7	54,4	62,5	67,4	68,6
30-34	6,3	5,7	8,7	8,7	11,2	13,3	15,8	18,2	21,6
35-39	2,0	1,5	2,2	1,8	2,4	2,5	3,4	3,6	3,9
				Se	econd order				
15-19	60,8	54,0	59,1	50,6	52,3	52,3	63,3	80,4	74,6
20-24	119,3	88, <i>3</i>	67,5	62,9	60,5	59,4	59,1	61,2	61,2
25-29	66,6	52,3	53,8	51,3	50,5	52,8	52,8	55,3	54,3
30-34	16,7	15,0	18,7	19,5	20,6	23,6	26,3	29,5	32,1
35-39	3,2	3,0	3,7	3,6	4,1	4,3	4,9	5,7	6,7
				Third a	and higher order	r			
15-19	7,2	6,7	11,2	7,5	13,3	16,1	14,2	14,2	16,3
20-24	30,0	21,4	17,5	17,2	17,2	18,1	20,4	21,4	22,3
25-29	43,0	32,8	24,8	22,5	21,2	20,6	20,8	20,3	20,3
30-34	29,8	24,0	22,7	21,3	21,1	21,5	21,1	21,3	20,2
35-39	11,3	10,4	11,0	11,0	10,7	11,4	11,4	12,4	12,3

Note: The age structure of female population by marital status since 2001 was estimated by the Demographic Research Centre

Live births	1990	1995	2000	2001	2002	2003	2004	2005	2006
Total	79 989	61 427	55 151	51 136	50 841	51 713	53 747	54 430	53 904
				Number of liv	e births within	marriage			
Total	73 904	53 680	45 082	41 031	39 857	39 640	40 428	40 294	39 084
1	29 722	22 311	19 813	17 478	17 263	17 029	18 051	17 617	16 993
2	26 945	18 907	15 410	14 371	13 875	13 956	13 833	14 215	13 993
3	11 071	7 426	5 392	4 990	4 783	4 735	4 764	4 698	4 535
4 +	6 166	5 036	4 467	4 192	3 936	3 920	3 780	3 764	3 563
			Pro	oportion of live	births within n	narriage in %			
Total	100	100	100	100	100	100	100	100	100
1	40,2	41,6	43,9	42,6	43,3	43,0	44,6	43,7	43,5
2	36,5	35,2	34,2	35,0	34,8	35,2	34,2	35,3	35,8
3	15,0	13,8	12,0	12,2	12,0	11,9	11,8	11,7	11,6
4 +	8,3	9,4	9,9	10,2	9,9	9,9	9,3	9,3	9,1
				Number of e	xtra-marital liv	e births			
Total	6 085	7 747	10 069	10 105	10 984	12 073	13 319	14 136	14 820
1	3 626	4 293	5 427	5 273	5 868	6 593	7 105	7 633	8 246
2	1 201	1 675	2 191	2 250	2 4 5 6	2 621	2 936	3 121	3 167
3 +	1 258	1 779	2 451	2 582	2 660	2 859	3 278	3 382	3 407
			P	roportion of ext	tra-marital live	births in %			
Total	100	100	100	100	100	100	100	100	100
1	59,6	55,4	53,9	52,2	53,4	54,6	53,3	54,0	55,6
2	19,7	21,6	21,8	22,3	22,4	21,7	22,0	22,1	21,4
3 +	20,7	23,0	24,3	25,6	24,2	23,7	24,6	23,9	23,0

Graph 3.6 First marital births by the time elapsed from marriage



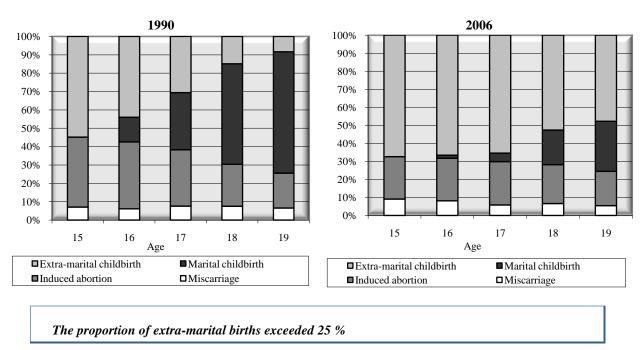
The postponement of childbearing is not a mere result of the delay in stepping into marriage. The trends show also a delay of the birth of the first child into marriage and we can speak about the postponement of childbearing within marriage. The proportion of first marital children born during the third year after the wedding increased from 12 % in 1990 to 33 % in 2006. In contrast, the proportion of children conceived prior to the wedding (and hence born within 8 months of the duration of marriage) has decreased from 56 to 38 % during the same period. Consequently, most likely the number of the "shot-gun" marriages provoked by the bride's pregnancy has reduced as well. The majority (67 %) of the first marital children is born during the first two years after the wedding. However, it was a vast majority of 88 % in 1990.

A majority of the teen-age pregnancies results in extra-marital childbirth

Tables 3.5 and 3.6 reveal that married women aged 16 - 19 years are a special sub-group of the female population who are typical with an early and high fertility. Fertility rates of married 16 - 19 year olds have decreased only slightly and, moreover, fertility rates of the second and higher birth order have even increased. High fertility rates in case of the first birth are a result of marriages provoked by the bride's pregnancy since there is strong evidence that pregnancy is an incentive for the early marriage. However, it is important to emphasise that the proportion of married 16 - 19 year old girls is very low (approximately 1 % of the age group) and most children of the teen-age mothers are born out of wedlock. The strategy of bearing children into marriage in case of the teen-age pregnancy was more widespread until 1990 among 18 - 19 year olds while among 17 year olds identically 1/3 of brought-to-term pregnancies resulted in extra-marital and marital birth. In 2006, out of wedlock childbirth became dominant among all pregnant teen-agers. The change was a response to the increasing acceptance of the single mothers in society was reduced with the increasing emancipation of women (Vašková 2005).

Childbirth dominates over induced abortion as a solution to the teen-age pregnancy. Induced abortion is more common among 15 - 17 year olds compared to 18 - 19 year olds. Interestingly enough, induced abortion is a dominant solution to the teen-age pregnancy among 15 - 17 year olds in the Czech Republic (ibid).

Overall, high fertility of the teen-age married women has to be interpreted within the framework of the generally decreasing teen-age fertility. The major decline occurred during 1990 – 2003. However, teen-age fertility is double the Czech values in spite of the downward trend (according to the data of the Czech Statistical Office). The halt in the decrease of teen-age fertility after year 2003 as well as the increasing fertility of the higher parity births are surely a negative tendency. Early onset of childbearing and high fertility in an early age is typical for the segregated and separated Roma in particular. Hence, the above mentioned trends in teen-age fertility surely impact the education enrolment of the young mothers which results in their low qualification and problems at the labour market (Potančoková and Šprocha 2007, Kumanová and Džambazovič 2002).



Graf 3.7 Brought-to-term pregnancies at the age 15 - 19

For the first time in history, the proportion of extra-marital births exceeded 25 % in 2005 and 2006. During the 1970s and 1980s the proportion of extra-marital births was settled at 5 - 7 %, however, the proportion of premarital conceptions (births that occurred within 8 months after the wedding) was increasing. Birth of the child within wedlock was a common and generally expected solution to the (unplanned) extra-marital pregnancy. Since 1990, the proportion of extra-marital births has increased to the current 27.5 % as a result of the changing social norms in domains of reproduction and partnership. Simultaneously, the proportion of premarital conceptions declined from 55 % to 38 %. The increasing proportion of extra-marital births is coupled with an increasing out-of-wedlock fertility rates, mainly among younger never-married women. Despite a part of the extra-marital children is born to the single mothers, the rapid increase is most likely (interpreted as) a result of the spreading cohabitation².

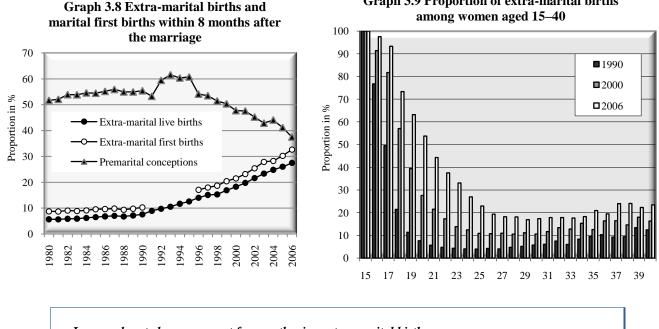
 $^{^{2}}$ Due to lack of data it is not possible to quantify the proportion of extramarital children born to the single mothers and to the cohabiting couples.

First births are most frequently extra-marital: One third of first births occurred out of wedlock in 2006. However, it is unknown how many parents step into marriage in the months or years following the birth of the child. It is likely that this reproductive strategy is spreading during the past several years. The increase in proportion of extra-marital according to their birth order was proportional. The least extra-marital children still are among second births. Thirty % of extra-marital births are among the third and higher birth orders. The fact that most extra-marital children are of the first parity is not unusual, however, high proportion of the extra-marital higher parity births points to the existence of a specific sub-population among whom extramarital childbearing and high fertility is a common behaviour. Increasing weight of the higher birth orders on the total number of extra-marital births can also be a result of the spreading cohabitation alternative to marriage.

Most extra-marital births are of mothers within age 24. After 1990 the proportion of extra-marital births increased in all age groups, however, among the 20 - 25 year olds it increased fivefold.

Tab. 3.8 Proportion of extra-marital live births	per 100 live births of the respective birth order

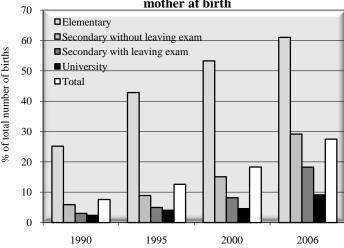
Birth order	1990	1995	2000	2001	2002	2003	2004	2005	2006
First	10,9	16,1	21,5	23,2	25,4	27,9	28,2	30,2	32,7
Second	4,3	8,1	12,4	13,5	15,0	15,8	17,5	18,0	18,5
Third +	6,8	12,5	19,9	21,9	23,4	24,8	27,7	28,6	29,6
Total	7,6	12,6	18,3	19,8	21,6	23,3	24,8	26,0	27,5



Lower-educated women most frequently give extra-marital birth

In spite of the general increase in extra-marital childbearing, it still is typical for the lower-educated women. Out of all children born to university-educated women only 10 % were extra-marital in 2006, despite the proportion has increased in 350 % since 1990. Extra-marital childbearing remains marginal among the university graduates. In contrast, more than 60 % of all births given by elementary-educated women were extra-marital in the same year. The growth in proportion of extramarital births was most intense among women with lower-secondary education; however, in comparison to other educational categories the overall proportion is second lowest (18 %).

The reasons for more widespread extra-marital childbearing among lower-educated women are most likely several. The social allowances and social benefits in motherhood are more generous for the single mothers compared to women with partner. Also extended duration of maternity leave for the single mothers (37 compared to 28 months) can be a motivation for women with lower income and it can be a rational decision in their situation.



Graph 3.10 Extra-marital births by education of mother at birth

Graph 3.9 Proportion of extra-marital births

Social and educational homogamy may also play a role: lower educated women are likely to have lower-educated partners who are at higher risk of unemployment, are more likely to have low or irregular income or to commute to work for extended periods of time (Hamplová and Řeháková 2006). Marriage may not be for these women the most appealing alternative, moreover, they may hope for a better partner. Also, single motherhood can be a risk-averse strategy: choice of a risky alternative may result in decreasing insecurity if the consequence of such behaviour is predictable in comparison to perhaps better appealing alternative with unsure consequences (ibid, Vašková 2005).

4. ABORTION

Number of abortions and abortion rates have rapidly decreased since 1990 and have reached the lowest historical levels. The declining number of induced abortions, which counts 75 % of all abortions, drives the favourable trend. The number of performed induced abortions was lower only in 1958 (12383) compared to 2005 and 2006. However, the number of applications for induced abortion in 1958 was higher than in 2005 and 2005 (14618 applications for induced abortion compared to 14427 induced abortions in 2005 and 14243 in 2006). In 1958 induced abortion on demand of the woman was accessible for the first time, however, not all applications were considered well-grounded and the number of performed abortions was lower.³ In case all applications would have resulted in induced abortion in 1958, we could speak of the lowest number of induced abortions and in all indicators since the legalisation of induced abortion.

Tab. 4.1 The main abortion indicators

	1990	1995	2000	2001	2002	2003	2004	2005	2006
Total number of abortions	56 176	35 879	23 593	22 792	22 141	21 159	20 075	19 332	19 054
Spontaneous abortions	7 739	5 725	5 1 2 5	4 766	4 759	4 937	4 768	4 905	4 811
Induced abortions*	48 437	30 154	18 468	18 026	17 382	16 222	15 307	14 427	14 243
Induced abortions due to health rea- sons** and ectopic pregnancies	4 850	5 934	4 646	4 802	4 696	4 541	4 616	4 324	4 275
- per 100 induced abortions	10,0	19,7	25,2	26,6	27,0	28,0	30,2	30,0	30,0
Brought-to-term pregnancies	136 566	97 547	78 959	74 135	73 176	73 089	74 033	73 957	73 176
Total brought-to-term pregnancies rate	3,52	2,43	1,87	1,76	1,72	1,71	1,73	1,72	1,71
Abortions per 100 births									
- total	69,9	58,2	42,6	44,4	43,4	40,7	37,2	35,4	35,2
- spontaneous	9,6	9,3	9,3	9,3	9,3	9,5	8,8	9,0	8,9
- induced	60,3	48,9	33,4	35,1	34,1	31,2	28,4	26,4	26,3
Abortions per 100 brought-to-term pregnan- cies									
- total	41,1	36,8	29,9	30,7	30,3	28,9	27,1	26,1	26,0
- spontaneous	5,7	5,9	6,5	6,4	6,5	6,8	6,4	6,6	6,6
- induced	35,5	30,1	23,4	24,3	23,8	22,2	20,7	19,5	19,5
Total abortion rate	1,43	0,90	0,57	0,55	0,53	0,51	0,48	0,46	0,45
Total spontaneous abortion rate	0,20	0,14	0,12	0,11	0,11	0,12	0,11	0,12	0,11
Total induced abortion rate	1,23	0,76	0,45	0,44	0,42	0,39	0,37	0,35	0,34
Mean age at abortion	28,67	28,89	29,23	29,33	29,47	29,64	29,73	29,90	29,92
Mean age at spontaneous abortion	26,75	27,37	28,26	28,48	28,76	29,01	29,36	29,66	29,92
Mean age at induced abortion	28,98	29,17	29,49	29,54	29,66	29,83	29,85	29,98	29,92

* including induced abortions of ectopic pregnancies

** The number is a sum of the induced abortions within 12th week of pregnancy due to health reasons, induced abortions in 13th to 24th week

of pregnancy and other medical abortions

Data source: Institute of Health Statistics and Information and Statistical Office of the SR

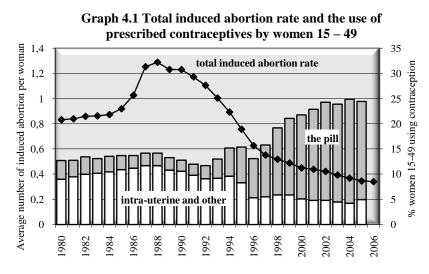
Indicators of induced abortion are lowest since 1958

The number of induced abortions reached the highest level in 1988 (51000). High induced abortion in the late 1980s was a consequence of the liberalised legislation: the abortion committees were abolished and the so called mini-abortions, safer and less harmful to women's health, were introduced. As a result, induced abortion became widely available on demand of the woman. Moreover, while induced abortion was free of charge contraception was not. Information on family planning and availability of the effective contraception was low, psychological factors also played a role as well as attitudes of the gynae-cologists, who were reluctant to prescribe the pill or IUD (intra-uterine device) to young and childless women (Potančoková 2007). The proportion of women using the prescribed contraceptives was low already before the liberalisation of the abortion law in 1986 compared to the Western European countries (OSN 1988) and this proportion further declined. The proportion of women using the pill or IUD dropped from 14.4 % in 1988 to 12.2 % in 1992 and the finding confirms a de-motivating effect of the free of charge induced abortion on prevention against the unwanted pregnancy. Induced abortion was widely used as a method of birth control instead of effective contraception since the legalisation.

The situation has been changing since the 1990s and a rapid decline in both the number and indicators of induced abortion occurred. The drop in induced abortion mirrors a more responsible attitude towards parenthood and reproductive health of the

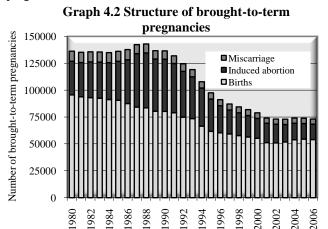
³ Since 1987 all applications result in induced abortion, unless the woman cancels the application, due to changed legislation.

population. The decreasing abortion is an integral part of the overall transformation in reproductive behaviour of the population. Improvements in information on birth control and family planning and spreading availability of the effective contraception, particularly the pill, played an important role. The proportion of women aged 15 - 49 using either the pill or IUD has



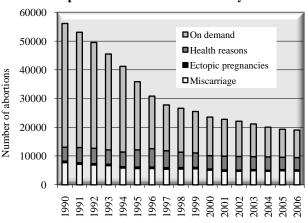
doubled to 25 % since 1990. Introduction of a charge for induced abortion on demand was introduced in 1993 accelerated the decline (induced abortions due to health reasons remained free of charge). In 2006, the number of induced abortions was only 28 % of the 1988 level. Total abortion rate has dropped from 1.23 to 0.34 induced abortions per woman in reproductive age during the same period. While the abortion ratio was at 60 induced abortions per 100 live births in 1990, it was only at 26 induced abortions per 100 live births in 2006. Changes are apparent also in the structure of brought-to-term pregnancies. The number of brought-to-term pregnancies decreased during 1990 - 2006 from 136.5 to 73 thousand due to fertility decline and a favourable abortion trend. In 1990 only 59 out

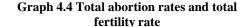
of 100 brought-to-term pregnancies ended up in childbirth compared to 74 % in 2006. In 2005 and 2006 19.5 % of brought-to-term pregnancies resulted in induced abortion while in 1990 it was 35.5 %.

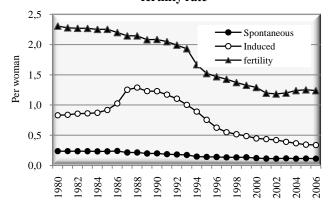


The declining number of induced abortions resulted in the changing structure. The proportion of induced abortions due to health reasons has increased from 10 to 30 % during 1990 -2006. It is apparent that the decline in the number of induced abortions considers reduction in abortion on demand of woman. The finding is in line with the interpretation of the lowering induced abortion due to spreading contraception. The use of birth control limits the number of unintended pregnancies, which could possibly result in induced abortion on demand of woman. It is important to emphasise, that the increase in proportion of induced abortion due to health reasons was not provoked by worsening health status of women during the mid-1990s but it was most likely a pragmatic response to the changed legislation. A more frequent classification of the induced abortion as due to medical reasons could have been influenced by the attempts of women to get a free of charge abortion, since charges were introduced in 1993. However, the

Graph 4.3 Structure of abortion by causes







change in legislation could have caused only a temporary upswing. In the present situation, an increasing age at childbearing in hand with an increasing number of pregnancies of women older than 30 could be affecting the number of induced abortion due to health reasons. The experts warn of the increasing risks related to pregnancy and delivery, as well as to more likely occurrence of a miscarriage among women aged 35 and older.

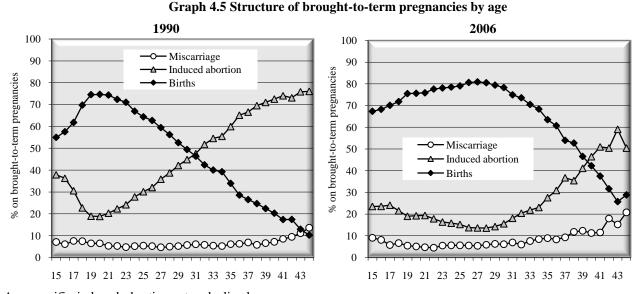
Until the 1990s, the trends in induced abortion and in fertility were often contrasting: increase in induced abortion was negatively influencing number of births and fertility rates and fertility was increasing when abortion rates decreased. Over the 1986 – 1989 the decline in the total fertility rate was accelerated by the rapidly increasing induced abortion rates: the average

number of children per woman decreased from 2.2 to 2.08 children while the total abortion rate increased from 1.03 to 1.23 induced abortions per woman between 1986 and 1989. The opposite trend in induced abortion and fertility has diminished during the 1990s when both were declining. However, the drop in total induced abortion was more dynamic (-39 %) compared to total fertility rate (-27 %) during 1990 – 1995. The overall decline in total induced abortion rate has been even more rapid (down to 72 % of the 1990 level).

The age at which induced abortions prevail over childbirths has increased in 10 years

Besides the postponement of childbearing, the decline in induced abortion is one of the major changes in reproductive behaviour of women in Slovakia during the 1990s. Delayed childbearing (and hence delayed pregnancies) influenced the increase in the mean age of woman at spontaneous abortion, which has prolonged from 26.8 to 30 years since 1990. The change was far less pronounced in the mean age of woman at induced abortion, which has increased only in 1 year to 30 years.

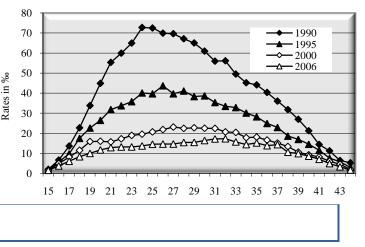
Changes in the structure of brought-to-term pregnancies by age of women are a result of shifts in the timing of pregnancies and of the decreasing induced abortion in particular. The least induced abortions occur in age when highest fertility rates are recorded (25 to 30 years), hence in age most desirable for childbearing and starting a family. The proportion of induced abortions on brought-to-term pregnancies increases more significantly since age 35. Induced abortions prevail over childbirths at age 40 onwards, when about 50 % of all brought-to-term pregnancies terminate in induced abortion. Along with decreasing induced abortion indicators, the age at which induced abortion prevails over childbirths has shifted in 10 years. In 1990, proportions of induced abortion and childbirths on brought-to-term pregnancies were equal at age 31 already. The proportion of pregnancies resulting in childbirth has increased in all age groups, and most significantly among 19 - 31 year old women. In 2006, 75 to 81 % of brought to term pregnancies of women aged 19 - 31 ended up in childbirth.



Age-specific induced abortion rates declined in all age groups. Consequently, the significant age differentials, apparent in the mid-1990s still, have diminished. The rates were declining the most during 1990 – 2000, afterwards the decline slowed down although it still is ongoing. In 2006, the induced abortion rates were highest among women aged 28 - 35 (15 - 17 %), however, these women have high fertility rates as well. Induced abortion rates declined only slightly among girls aged 15 - 17, but the proportion of brought-toterm pregnancies increased among them. In 1990, 55 - 60 % pregnancies of 15 - 17 year olds ended up in childbirth, compared to 70 % in 2006.

Miscarriage has settled at low level

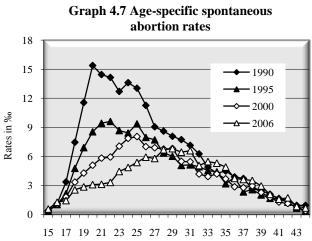
Graph 4.6 Age-specific induced abortion rates



Trends in spontaneous abortion stabilised and in the long-run 6.5 out of 100 brought-to-term pregnancies end-up in miscarriage. The total spontaneous abortion rate has settled at 0.11 - 0.12 miscarriage per woman. The decrease of spontaneous abortion quantum which was apparent during the early 1990s was a consequence of the improving health care for pregnant women, modernisation of health care and, last but not least, of the improving health status of women, including the reproductive health.

Age-specific spontaneous abortion rates depend on the distribution of pregnancies over the reproductive life-span of women. The rates are highest in age interval during which most pregnancies occur. During 1990 – 2006 spontaneous abortion rates decreased particularly among 18 – 27 year old women. Besides the generally decreasing tendency, postponement of childbearing (and pregnancies) to higher age played a significant role.

The proportion of miscarriage on brought-to-term pregnancies increased to about 10 % among women aged 33 and older as miscarriage becomes more frequent with an increasing age. In 2006, 15 - 20 % of brought-to-term pregnancies of women aged 40+ resulted in miscarriage. Ability of woman to get pregnant and a probability that pregnancy ends up in live birth decreases since age 35. The increase in the proportion of miscarriage on brought-to-term pregnancies is probably caused by



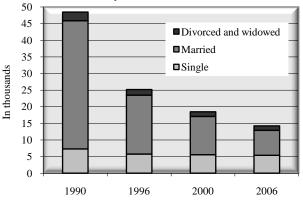
shifting age at first pregnancy. In the past, it was unusual that women 30 and older would become pregnant for the first time at that age, however, currently the proportion of these women increases.

Married women having two or more children are the most frequent induced abortion applicants; however, the proportion of single childless women demanding induced abortion has increased

Induced abortion varies significantly among women with different marital status. Since 1990 the induced abortion has been decreasing among women of all categories. The decline was most pronounced (-60 to -70 %) among married women aged 20 - 49, among divorced women aged 20 - 34 and finally among nevermarried 20 - 29 year old women. Induced abortion quantum has been lowest among never-married women during the whole period 1990 – 2006, however, due to a more rapid decline among married women their share on total number of induced abortions increased from 15 to 38 %. Intensity of induced abortion did not increase in any group of women according to marital status and age. The differences in the tempo of decrease had resulted in changed proportions of women by marital status on the total number of abortions.

As usually, the highest induced abortion rates are among divorced and widowed women of all age groups in 2005 and 2006.

Graph 4.8 Structure of induced abortions by marital status



In 1990, divorced and widowed women aged 20 - 34 had the highest induced abortion rates, at age 35+ the rates were highest among married women. The high induced abortion quantum is not surprising among the divorced and widowed, since these women are likely to be in complicated life circumstances. These women also frequently already have children from the previous marriage.

A married woman having two or more children still is a typical induced abortion applicant. In 1990, 80 % of all induced abortions were performed to married women; the proportion decreased to 53 % in 2006. Married women often used induced abortion instead of contraception to keep their family size at desired number of children. This behaviour and a dominance of married women with children among the abortion applicants were typical for the former communist countries that liberalised induced abortion. Induced abortion was not an emergency solution in case of contraceptive failure but it was used instead of birth control. The function of induced abortion was not only to keep the family size at desired number (of mostly two) children but also to achieve a favourable spacing of births.

The structure of induced abortion applicant is becoming similar to the one of the Western European countries, where most induced abortions are performed to single childless women (Velická 2001). Only 11 % of all induced abortions were of single childless women in 1990 and this proportion increased to 23 % in 2006. In 2006, the proportions of married women with two children and single childless women were equal for the first time in history. 46 % of all induced abortions were performed to these two groups of women. In case married women with three and more children are included the proportion increases to 57.5 %.

Despite the overall number of induced abortion decreases, proportion and number of induced abortion increases among single women with children. The proportion of childless women among never-married has dropped from 76 % to 62 %. Since

the decrease in the number of abortions was slower among never-married compared to married women their proportion on total number of induced abortions has increased to 23 %. The proportion of married women with two and more children is decreasing among the married while particularly the proportion of childless married women increases. The number of induced abortions decreased among all groups of women except for the never-married women with children and childless married women in population are likely explanations of the increasing trend. The proportion of extra-marital children increased in all birth orders and postponement of childbearing within marriage means an increasing number of childless married women. The analysis proves that transformation of reproductive behaviour of women is not expressed only in decreasing induced abortion rates, but also in changing structure of induced abortion.

	1990	1996	2000	2005	2006	1990	1996	2000	2005	2006		
		All womer	n (per 1000	women)		Married (per 1000 married women)						
15-19	78,6	50,4	41,8	30,5	29,4	46,8	44,3	30,2	30,1	26,6		
20-24	297,7	130,5	87,2	64,3	64,5	76,3	35,7	24,8	21,1	21,2		
25-29	344,0	164,5	110,6	77,4	74,6	75,6	35,5	24,6	17,6	17,0		
30-34	267,5	144,2	103,7	80,6	80,8	57,4	30,4	21,4	16,4	16,3		
35-39	179,1	96,0	73,6	63,7	63,6	37,8	19,9	14,9	12,5	12,4		
40-44	58,4	37,8	29,8	26,9	25,4	12,4	7,9	6,0	5,4	5,0		
45-49	4,4	3,1	2,2	2,1	1,3	0,9	0,7	0,5	0,4	0,2		
% of induced abortions	100	100	100	100	100	79,6	70,2	62,2	54,9	52,7		
	Never-ma	arried (per	1000 neve	r-married	women)	Divorced and widowed (per 1000 divorced and widowed women 9						
15-19	12,4	9,1	8,0	5,9	5,8	x	x	x	x	x		
20-24	36,3	17,7	14,1	10,9	11,1	98,7	51,9	33,9	32,4	31,2		
25-29	33,2	20,3	14,9	11,8	11,9	85,7	47,2	35,2	28,3	24,5		
30-34	24,7	16,6	12,9	12,1	13,2	56,3	32,2	27,4	22,7	22,5		
35-39	17,7	12,2	10,0	10,5	10,0	32,7	19,9	17,0	16,1	17,1		
40-44	5,4	4,5	4,4	4,4	4,7	10,8	7,2	6,0	5,8	5,7		
45-49	1,6	0,4	0,5	0,3	0,3	0,7	0,3	0,3	0,4	0,3		
% of induced abortions	15,1	22,9	30,1	35,9	37,9	5,3	6,8	7,7	9,2	9,5		

Tab. 4.2 Age-specific induced abortion rates by marital status

Tab. 4.3 Induced abortions according to live born children the woman had and by marital status

	1990	1996	2000	2005	2006	1990	1996	2000	2005	2006	1990	1996	2000	2005	2006
			Married				Not	married	l			Neve	r marrie	d	
0	1,2	3,1	4,7	7,5	8,2	56,8	57,2	56,6	51,8	50,2	75,5	73,1	70,1	64,1	61,7
1	17,3	22,1	24,9	26,5	26,3	20,8	22,3	21,9	25,1	25,8	16,2	17,8	18,4	21,1	22,8
2	55,2	52,0	47,7	44,6	43,6	15,2	14,2	14,6	15,5	15,9	5,7	6,2	7,5	9,5	9,8
3+	26,3	22,8	22,7	21,5	21,9	7,2	6,2	6,9	7,6	8,1	2,6	2,8	4,0	5,3	5,7
Total	100	100	100	101	100	100	100	100	100	100	100	100	100	100	100
	% per total number of induced abortions														
0	1,0	2,2	2,9	4,1	4,3	11,6	17,0	21,4	23,4	23,7	11,4	16,8	21,1	23,0	23,4
1	13,8	15,5	15,5	14,5	13,8	4,2	6,6	8,3	11,3	12,2	2,4	4,1	5,6	7,6	8,6
2	43,9	36,6	29,7	24,5	23,0	3,1	4,2	5,5	7,0	7,5	0,9	1,4	2,2	3,4	3,7
3+	20,9	16,0	14,1	11,8	11,5	1,8	2,6	4,2	6,3	7,3	1,9	2,2	3,2	4,2	4,6
Total	79,6	70,2	62,2	62,2	52,7	20,4	29,8	37,8	37,8	47,3	15,1	22,9	30,1	30,1	37,9
						Num	ber of ir	nduced a	bortions						
0	464	553	536	536	618	5 606	4 288	3 957	3 957	3 382	5 510	4 222	3 898	3 898	3 327
1	6 676	3 901	2 857	2 857	1 972	2 057	1 670	1 530	1 530	1 740	1 182	1 028	1 0 2 6	1 0 2 6	1 2 3 1
2	21 279	9 202	5 477	5 477	3 270	1 501	1 065	1 017	1 017	1 070	414	360	415	415	526
3+	10 142	4 027	2 612	2 612	1 645	712	467	482	482	546	191	164	224	224	308
Total	38 561	17 683	11 482	11 482	7 505	9 876	7 490	6 986	6 986	6 738	7 297	5 774	5 563	5 563	5 392

Number of women who experienced two and more induced abortions decreases

In 1990, 28 % of induced abortions were of the second and 14 % of the third and higher order. In 2005 and 2006 these proportions dropped to 20 % and 11 % respectively. Mostly married women were experiencing repeated abortions. The decline is not rapid which is very likely caused by slowly changing attitudes towards abortion in part of the female population. It is likely that younger women who are better informed about birth control methods, family planning and risks related to induced

abortion do prefer contraception and use it more than older women who may behave more in accordance with the previous reproductive behaviour. Especially women who experienced four and more induced abortions may belong to a specific social strata or subpopulation, since the proportion of fourth and higher order induced abortions remains unchanged.

	1990	1996	2000	2005	2006	1990	1996	2000	2005	2006		
			All women			All women (%)						
1	28 075	14 800	11 725	9 795	9 832	58,0	58,8	63,5	67,9	69,0		
2	13 540	6 459	4 260	3 013	2 860	28,0	25,7	23,1	20,9	20,1		
3	4 854	2 621	1 649	1 072	1 006	10,0	10,4	8,9	7,4	7,1		
4+	1 968	1 293	834	547	545	4,1	5,1	4,5	3,8	3,8		
		Ν	farried (%)			Not married (%)						
1	54,9	54,2	58,2	64,5	65,3	69,8	69,5	72,2	72,0	73,1		
2	29,8	27,9	25,8	22,4	22,0	20,7	20,3	18,6	19,1	18,0		
3	10,8	12,1	10,5	8,7	8,3	7,0	6,4	6,4	5,9	5,7		
4+	4,5	5,7	5,6	4,4	4,4	2,5	3,7	2,8	3,0	3,1		

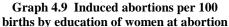
Tab. 4.4 Induced abortions according to the order of the induced abortion and by marital status of women

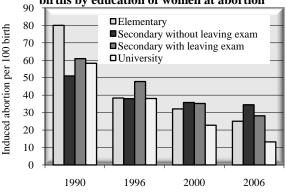
University educated women have transformed their behaviour regarding induced abortion most substantially compared to other educational groups. Abortion index, the number of induced abortions per 100 births, decreased among university graduates from 58 to 13 % during 1990 – 2006 and it is outstanding low compared to other educational groups.

The abortion index changed the most among elementary educated women, who were using induced abortion instead of birth control the most until 1993. Mechanisms that have lead to change in behaviour are most likely different among the two educational groups of women. In general, information on contraception and other domains of sexual life improved due to several campaigns and widely accessible information in media. Young generations are better informed not only on various birth control methods but also on risks related to induced abortion and about various myths regarding sexuality and reproduction (for example, in 1996 survey on reproductive behaviour of women in Slovakia 50 % of women aged 20 to 40 years declared they thought they cannot get pregnant at first sexual intercourse). Introduction of a fee for abortion on demand of woman certainly influenced the decrease of induced abortion practice among women of lower social strata, which more likely have low income and education. The economic incentive was surely important for women with lower income who used to prefer free-ofcharge induced abortion to contraception which was not covered by the health insurance. Since the introduction of charges the induced abortion ratio decreased to 25 % among women with elementary education.

In 2006 the induced abortion ratio was highest among lower secondary educated women (34 %). In 1990, however, the index was lowest among these women but it decreased the least (-32 %). The index dropped the most among university graduates (-77 %) and elementary educated (-69 %).

Trends in induced abortion have been favourable during the last 16 years and both the number and level of abortion decreased substantially. During the early 1990s the decline was a result of the spreading modern contraception (of the information, accessibility and better quality). Moreover, during the early 1990s the pill was covered by the health insurance and since 1993 a charge for induced abortion was introduced. A public discussion on induced abortion emerged and both moral and health risks were emphasised. All the above mentioned factors lead to changing attitudes towards induced





abortion. Civic initiatives (whether pro-life of pro-choice) and the Catholic Church played important role in this process. The decline slowed down during the last several years and it is likely that it will soon reach its limits. The potential for further decline of induced abortion is in substitutions of the older cohorts of women in reproductive age by the young women who may have more favourable attitudes towards induced abortion and who are more likely to prefer contraception as means of family planning. Another favourable trend of the 1990s was decrease of spontaneous abortion to a very low level which can be interpreted as a result of the improved reproductive health of women.

5. MORTALITY

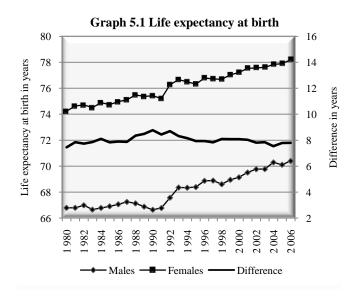
Tab. 5.1 The main mortality indicators

		1990	1995	2000	2001	2002	2003	2004	2005	2006
Deaths	males	30 263	28 128	28 157	27 705	27 415	27 702	27 304	28 151	28 091
	females	24 356	24 558	24 567	24 275	24 117	24 528	24 548	25 324	25 210
	total	54 619	52 686	52 724	51 980	51 532	52 230	51 852	53 475	53 301
Standardized mortality rates		10,55	9,82	9,17	9,13	8,92	8,96	8,75	8,79	8,56
Life expectancy at birth	males	66,65	68,39	69,14	69,51	69,77	69,77	70,29	70,11	70,40
	females	75,42	76,33	77,22	77,54	77,57	77,62	77,83	77,90	78,20
	difference	8,78	7,94	8,08	8,03	7,81	7,84	7,54	7,79	7,80
Life expectancy at age 50	males	21,64	22,66	23,04	23,19	23,44	23,51	23,81	23,61	23,89
	females	28,06	28,59	29,18	29,39	29,60	29,60	29,75	29,78	29,91
	difference	6,42	5,93	6,14	6,20	6,16	6,09	5,94	6,17	6,02
Life expectancy at age 65	males	12,22	12,68	12,91	13,00	13,19	13,17	13,33	13,20	13,32
	females	15,71	16,07	16,38	16,64	16,82	16,77	16,90	16,91	17,07
	difference	3,49	3,39	3,47	3,64	3,62	3,60	3,57	3,70	3,75
Life expectancy at age 80	males	5,60	6,15	6,18	6,08	5,98	5,96	6,02	5,77	6,08
	females	6,50	6,75	6,60	6,79	6,96	6,84	6,97	6,75	6,93
	difference	0,90	0,60	0,42	0,71	0,98	0,88	0,95	0,98	0,85
Infant mortality rate		11,99	10,99	8,58	6,24	7,63	7,85	6,79	7,20	6,59

The positive mortality development (Vaňo 2005), hereby also prolonging of the lifespan, has been continuing as the annually increasing values of life expectancy at birth demonstrate. The positive trend is a result of the prevailing positive mortality factors over the factors with negative effect. Whether this development is sufficient to fulfil our expectation is the focus of this part of the publication.

Despite the increasing number of deaths the life expectancies keep increasing

53301 people died during the year 2006 of which 28091 were males and 25210 females. The number of deaths increased in 787 males and 662 females in comparison to 2004. However, the increase in number of deaths did not cause mortality worsening. The increase in the total number of deaths was caused by the changes in population age structure⁴, as the standardized



mortality rate shows: the standardised mortality rates decreased from $8.75 \ \%$ to $8.56 \ \%$.

Life expectancy at birth development has increased as well. The only exception was a temporary decrease in the life expectancy at birth for man to the value 70.11 in 2005; in 2006 the indicator rose to 70.40 years. For the first time in history, the life expectancy of women at birth exceeded 78 years in 2006 (78.20 years). However, the decrease in sex differentials in life expectancy at birth that occurred in 2004 did not last and in 2005 and 2006 males lived on average 7.8 years shorter than women.

The situation was similar at the age 50. Life expectancy at age 50 among men reached 23.89 years in 2006 despite a moderate decrease in 2005 (23.61 years). The values of the indicator for women are close to 30 years (29.91). Sex differentials at this age have not changed significantly and remain at the level of 6 years.

In 2006, the life expectancy at age 65 for males reached 13.32 years. It was higher than in 2005 (13.20), but lower than in 2004 (13.33) when the highest value was recorded for

males.

The situation among women differs. The life expectancy at age 65 for the first time exceeded the level of 17 years (17.07). Sex differentials, which have been increasing in the long-run, reached 3.75 years in 2006.

⁴ The number of persons in the age of the highest mortality has increased.

The development of the life expectancy at age 80 for males is not favourable. The trend showed mostly decreasing tendency. In 2005 the life expectancy of men at age 80 dropped to the lowest value since 1992 (5.77). The increase to the value of 6.08 years did not mean a considerable progress. In contrast, among women the trend is favourable. The increase in the life expectancy at age 80 continues, although it was interrupted by a drop to value 6.75 in 2005 (the lowest value since 2001). Quite to the contrary, the value reached in 2006 (6.93) was close to the highest ever recorded value (6.97 in 2002).

Mortality during the first year of life still is above the lowest ever recorded level

		1990	1995	2000	2001	2002	2003	2004	2005	2006
						Deaths				
Up to 1 year	males	568	388	280	185	189	230	200	225	204
	females	391	287	193	134	199	176	165	167	151
	total	959	675	473	319	388	406	365	392	355
Up to 28 days	males	404	280	173	125	109	135	110	130	111
	females	265	203	124	86	129	99	101	95	79
	total	669	483	297	211	238	234	211	225	190
Up to 7 days	males	325	199	114	91	79	104	80	88	76
	females	208	137	84	72	91	75	70	65	55
	total	533	336	198	163	170	179	150	153	131
Stillbirths	males	211	134	116	111	98	121	95	102	110
	females	190	107	99	96	96	96	116	93	108
	total	401	241	215	207	194	217	211	195	218
						Rates				
Infant	males	13,81	12,35	9,92	7,00	7,27	8,67	7,23	8,04	7,37
	females	10,06	9,56	7,17	5,43	8,02	6,99	6,32	6,31	5,76
	total	11,99	10,99	8,58	6,24	7,63	7,85	6,79	7,20	6,59
Neonatal	males	9,82	8,91	6,13	4,73	4,19	5,09	3,98	4,65	4,01
	females	6,82	6,76	4,61	3,48	5,20	3,93	3,87	3,59	3,01
	total	8,36	7,86	5,39	4,13	4,68	4,52	3,93	4,13	3,52
Early neonatal	males	7,90	6,33	4,04	3,44	3,04	3,92	2,89	3,15	2,75
	females	5,35	4,56	3,12	2,92	3,67	2,98	2,68	2,46	2,10
	total	6,66	5,47	3,59	3,19	3,34	3,46	2,79	2,81	2,43
Post neonatal	males	3,99	3,44	3,79	2,27	3,08	3,58	3,26	3,40	3,36
	females	3,24	2,80	2,56	1,94	2,82	3,06	2,45	2,72	2,75
	total	3,63	3,13	3,19	2,11	2,95	3,33	2,87	3,07	3,06
Perinatal	males	12,97	10,56	8,12	7,61	6,78	8,44	6,31	6,77	6,69
	females	10,19	8,10	6,77	6,78	7,50	6,77	7,09	5,95	6,19
	total	11,62	9,36	7,46	7,21	7,13	7,63	6,69	6,37	6,45

Tab. 5.2 Indicators of the mortality during the first year of life

The infant mortality rate fell from 6.79 % to 6.59 % between 2004 and 2006. However, a significant increase to 7.20 % in 2005 has to be mentioned. The level of infant mortality rate recorded in 2006 is still higher than the lowest ever recorded value in 2004 (6.24 %). The trend was influenced by the infant mortality rate of boys, which increased from 7.23 % in 2004 to 8.04 % in 2005, but afterwards decreased to 7.37 % in 2006. Nevertheless, it is still above 7.00 % recorded in 2001.

The infant mortality rate of girls shows a decrease from 8.02 ‰ in 2002 to 5.76 ‰ in 2006. Similarly, the 2006 value was above lowest value reached in 2001 (5.43 ‰).

The above described trends in infant mortality rate are a result of the progress in its components – neonatal and postneonatal mortality rate. If these components had reached the lowest ever recorded values, the infant mortality rate would have been lower by approximately 1 %.

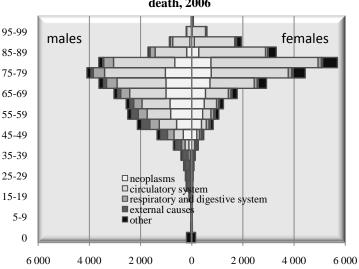
Perinatal mortality rate, which reflects the mortality up to 7 days after delivery including stillbirths, has a decreasing tendency since 2003. Although the lowest value was recorded in 2005 (6.37 %), 6.45 % in 2006 was still below 6.69 % in 2004. The increasing number of stillbirths in 2006 caused an increase of the perinatal mortality in that year.

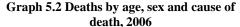
Age and sex mortality differentials according to the causes of death

If we take only the selected main causes of death into consideration, we can see that the intensity of mortality by the causes of death is different among men and women as well as among the age groups. In 2006 deaths due to circulatory system diseases, which cover 48.2 % of all deaths of males and 62.5 % of all deaths of females, are more pronounced since age 45 among males, and by 5 year lag, since age 50 among females.

Up to about age 65 number of deaths due to circulatory diseases shows double intensity for males compared to females. In more advance ages this excess gradually gets equal and later changes to female excess in mortality. Since age 80 the female excess reaches double and more the male mortality.

Mortality due to neoplasm covers 24.3 % of all deaths of males and 19.5 % of all deaths of females. The number of deaths due to neoplasm increases from age 40 for both sexes. The highest number was recorded at age 65 - 79 for males and at age 70 - 84 for females.





	All deaths, males	28 091		100%
	Neoplasms	6 815	100%	24%
C34	Malignant neoplasm of bronchus and lung	1 622	24%	6%
C18	Malignant neoplasm of colon	518	8%	2%
C61	Malignant neoplasm of prostate	501	7%	2%
C16	Malignant neoplasm of stomach	447	7%	2%
C25	Malignant Neoplasm of pancreas	346	5%	1%
C20	Malignant neoplasm of rectum	325	5%	1%
C22	Malignant neoplasm of liver and intrahepatic bile ducts	214	3%	1%
C15	Malignant neoplasm of oesophagus	213	3%	1%
C64	Malignant neoplasm of kidney, except renal pelvis	199	3%	1%
	Diseases of the circulatory system	13 538	100%	48%
I25	Chronic ischeamic heart disease	5 589	41%	20%
170	Atherosclerosis	2 312	17%	8%
I21	Acute myocardial infarction	985	7%	4%
I10	Essential (primary) hypertension	869	6%	3%
I63	Cerebral infarction	783	6%	3%
I64	Stroke, not specified as haemorrhage or infarction	391	3%	1%
I11	Hypertensive heart disease	333	2%	1%
I26	Pulmonary embolism	278	2%	1%
I61	Intracerebral haemorrhage	277	2%	1%
I69	Sequelae of cerebrovascular disease	178	1%	1%
	Diseases of the respiratory system	1 678	100%	6%
J18	Pneumonia, organism unspecified	709	42%	3%
J 44	Other chronic obstructive pulmonary disease	329	20%	1%
J15	Bacterial pneumonia, not elsewhere classified	207	12%	1%
	Diseases of the digestive system	1 802	100%	6%
K74	Fibrosis and cirrhosis of liver	507	28%	2%
K70	Alcoholic liver disease	489	27%	2%
	External causes of morbidity and mortality	2 454	100%	9%
X70	Intentional self-harm by hanging, strangulation and suffocation	315	13%	1%
W19	Unspecified fall	208	8%	1%
X31	Exposure to excessive natural cold	146	6%	1%
V03	Pedestrian injured in collision with car, pick-up truck or van	123	5%	0%
Y34	Unspecified event, undetermined intent	119	5%	0%
X45	Accidental poisoning by and exposure to alcohol	104	4%	0%
V43	Car occupant injured in collision with car, pick-up truck or van	74	3%	0%
W69	Drowning and submersion while in natural water	68	3%	0%

Deaths due to diseases of the respiratory and digestive system represented 12.4 % of all deaths of males and 9.3 % of all deaths of females in 2006. These deaths appear more intensively from age 40 for both sexes. At higher ages males' excess was recorded.

External causes of death, which cover 8.7 % of all deaths of males and 2.4 % of all deaths of females in 2006, appear in younger ages in contrast to other causes. They created the bulk of deaths at age 15 - 40, mainly for males.

A more detailed division of deaths by causes showed that 20 % of all deaths of males were due to the chronic ischemic heart disease in 2006. The second most frequent were deaths due to atherosclerosis (8 %) and deaths due to malignant neoplasm of bronchus and lung (6 %). Within the causes of death chapters, the acute myocardial infarction is responsible for 7 % of deaths due to diseases of the circulatory system and it is the most frequent cause of death besides the chronic ischemic disease. Malignant neoplasm of colon covers 8 % of deaths due to neoplasms. Deaths due to intentional self-harm dominate the external causes of death (13 %), in the chapter of respiratory diseases deaths due to pneumonia prevail, and in the chapter of digestive system deaths due to fibrosis and cirrhosis of liver are the most frequent.

	All deaths, females	25 210		100%
	Neoplasms	4 917	100%	20%
C50	Malignant neoplasm of breast	708	14%	3%
C18	Malignant neoplasm of colon	428	9%	2%
C34	Malignant neoplasm of bronchus and lung	397	8%	2%
C25	Malignant neoplasm of pancreas	329	7%	1%
C16	Malignant neoplasm of stomach	298	6%	1%
C56	Malignant neoplasm of ovary	277	6%	1%
C20	Malignant neoplasm of rectum	197	4%	1%
C53	Malignant neoplasm of cervix uteri	192	4%	1%
C54	Malignant neoplasm of corpus uteri	181	4%	1%
	Diseases of the circulatory system	15 759	100%	63%
I25	Chronic ischeamic heart disease	6 834	43%	27%
I70	Atherosclerosis	2 745	17%	11%
I10	Essential (primary) hypertension	1 187	8%	5%
I63	Cerebral infarction	890	6%	4%
I21	Acute myocardial infarction	600	4%	2%
I64	Stroke, not specified as haemorrhage or infarction	586	4%	2%
I11	Hypertensive heart disease	428	3%	2%
I26	Pulmonary embolism	361	2%	1%
I61	Intracerebral haemorrhage	273	2%	1%
I69	Sequelae of cerebrovascular disease	225	1%	1%
	Diseases of the respiratory system	1 283	100%	5%
J18	Pneumonia, organism unspecified	584	46%	2%
J15	Bacterial pneumonia, not elsewhere classified	167	13%	1%
J44	Other chronic obstructive pulmonary disease	129	10%	1%
	Diseases of the digestive system	1 067	100%	4%
K74	Fibrosis and cirrhosis of liver	232	22%	1%
K70	Alcoholic liver disease	159	15%	1%
	External causes of morbidity and mortality	608	100%	2%
W19	Unspecified fall	79	13%	0%
V03	Pedestrian injured in collision with car, pick-up truck or van	48	8%	0%
Y34	Unspecified event, undetermined intent	47	8%	0%
X31	Exposure to excessive natural cold	37	6%	0%
X70	Intentional self-harm by hanging, strangulation and suffocation	36	6%	0%
V43	Car occupant injured in collision with car, pick-up truck or van	31	5%	0%
X45	Accidental poisoning by and exposure to alcohol	23	4%	0%
V05	Pedestrian injured in collision with railway train or railway vehicle	19	3%	0%

Tab. 5.4 Most frequent causes of death, females, 2006

Similar to men, deaths due to chronic ischemic heart disease dominate with the proportion of 27 % among women in 2006 if we take the detailed classification of deaths into account. Deaths due to atherosclerosis and essential hypertension follow in the list. Within the causes of death' chapters, malignant neoplasm of breast is the most frequent cause of death among the neoplasm with 14 % share. Deaths caused by pneumonia dominate in the chapter of respiratory diseases. Similar to men, deaths due to fibrosis and cirrhosis of liver are most frequent in the chapter of digestive system. Unspecified falls prevail among the external causes of death

Tab. 5.5 Causes of deaths

	1990 ⁵	1995	2000	2001	2002	2003	2004	2005	2006
					Males				
Infectious and parasitic diseases	77	105	96	99	117	151	138	117	143
Neoplasms	6 297	6 657	7 015	7 025	6 768	6 822	6 812	6 944	6 815
Malignant neoplasms		6 599	6 985	6 997	6 729	6 788	6 763	6 906	6 766
Endocrine, nutritional and metabolic dis.	338	320	338	347	334	352	322	331	310
Diabetes mellitus		288	320	331	318	339	305	304	287
Diseases of the nervous system	187	141	302	340	334	356	353	367	378
Diseases of the circulatory system	14 735	13 926	13 605	13 425	13 181	13 145	13 072	13 468	13 538
Hypertensive diseases		604	1 549	1 540	1 457	1 444	1 382	1 434	1 277
Ischeamic heart diseases		7 469	7 476	7 275	7 090	7 298	7 218	7 064	6 788
Cerebrovascular diseases		2 339	2 140	2 1 3 2	2 203	2 182	2 096	1 946	1 850
Atherosclerosis		2 014	1 041	1 099	1 045	849	946	1 641	2 312
Diseases of the respiratory system	2 195	1 890	1 641	1 548	1 622	1 757	1 703	1 786	1 678
Diseases of the digestive system	1 960	1 484	1 751	1 666	1 751	1 690	1 591	1 668	1 802
Diseases of the genitourinary system	498	416	363	364	380	370	366	339	326
Abnormal findings		170	315	240	279	362	333	429	415
External causes of deaths	2 904	2 617	2 452	2 4 3 1	2 427	2 459	2 388	2 456	2 4 5 4
Transport accidents		709	679	654	598	663	610	594	648
Intentional self harm		609	594	580	617	648	564	584	464
Other causes of deaths	1 072	402	279	220	222	238	226	246	232
Total	30 263	28 128	28 157	27 705	27 415	27 702	27 304	28 151	28 091
					Females				
Infectious and parasitic diseases	55	80	72	87	84	111	96	114	140
Neoplasms	4 057	4418	4915	4845	4736	4794	4 864	4 930	4 917
Malignant neoplasms		4 348	4 886	4 818	4 716	4 770	4 819	4 888	4 883
Endocrine, nutritional and metabolic dis.	452	413	462	452	430	450	468	437	447
Diabetes mellitus		380	438	431	412	433	443	412	427
Diseases of the nervous system	198	96	197	225	240	271	255	316	285
Diseases of the circulatory system	14 393	15 097	15 380	15 269	14 887	15 065	15 056	15 663	15 759
Hypertensive diseases		875	1 932	1 989	1 932	1 886	1 871	1 886	1 732
Ischeamic heart diseases		6 996	8 212	7 947	7 812	8 081	8 040	8 201	7 595
Cerebrovascular diseases		3 029	2 537	2 560	2 560	2 651	2 650	2 375	2 274
Atherosclerosis		2 671	1 361	1 391	1 194	1 012	1 023	1 852	2 745
Diseases of the respiratory system	1 784	1 753	1 271	1 178	1 291	1 367	1 255	1 328	1 283
Diseases of the digestive system	915	775	879	936	1 040	1 002	1 069	1 117	1 067
Diseases of the genitourinary system	480	406	308	339	351	381	378	357	323
Abnormal findings		178	158	135	181	218	217	188	168
External causes of deaths	1 037	1 025	663	608	595	624	674	676	608
Transport accidents		214	171	176	180	194	159	170	173
Intentional self harm		126	135	112	100	105	112	95	68
Other causes of deaths	985	317	262	201	282	245	216	198	213
Total	24 356	24 558	24 567	24 275	24 117	24 528	24 548	25 324	25 210

No significant changes occurred in trends of mortality according to causes of death. Mortality, in most chapters which cover 99.2 % of all deaths, decreases during the period 1995 to 2006. Exceptions for both sexes are the causes connected with infectious and parasitic diseases and with diseases of the nervous system that display a mild mortality increase, measured by standardized deaths rates. Deaths due to abnormal findings in men and causes of death due to digestive system in women count among these causes. However, these causes of death contribute a mere 3.3 % to all deaths of males and 5.9 % to all deaths of females.

During the period 2004 - 2006, a decreasing tendency continues in majority of the causes of death. Naturally, there are some exceptions too: in case of men deaths due to digestive system and deaths due to traffic accidents increased, and among women deaths due to transport accidents as well.

 $^{^{5}}$ ICD – 9 classification was used up to year 1993, ICD – 10 from 1994 to 2006.

Tab. 5.6 Standardised mortality rates by causes of death ⁶

	1995	2000	2001	2002	2003	2004	2005	2006
				Μ	ales			
Infectious and parasitic diseases	0,05	0,04	0,04	0,05	0,06	0,06	0,05	0,06
Neoplasms	2,99	3,01	3,02	2,86	2,83	2,80	2,80	2,70
- Malignant neoplasms	2,97	2,99	3,01	2,84	2,82	2,78	2,79	2,68
Endocrine, nutritional and metabolic dis.	0,15	0,15	0,15	0,14	0,15	0,13	0,14	0,13
Diabetes mellitus	0,13	0,14	0,15	0,13	0,15	0,13	0,13	0,12
Diseases of the nervous system	0,06	0,12	0,14	0,13	0,14	0,14	0,14	0,15
Diseases of the circulatory system	6,73	6,19	6,26	6,06	6,03	5,93	5,94	5,86
Hypertensive diseases	0,28	0,69	0,69	0,65	0,64	0,61	0,62	0,54
Ischeamic heart diseases	3,58	3,42	3,42	3,30	3,38	3,32	3,16	2,96
Cerebrovascular diseases	1,13	0,98	1,01	1,01	1,00	0,96	0,86	0,80
Atherosclerosis	1,04	0,49	0,52	0,50	0,41	0,43	0,73	1,03
Diseases of the respiratory system	0,92	0,75	0,73	0,74	0,81	0,77	0,78	0,72
Diseases of the digestive system	0,64	0,71	0,68	0,70	0,66	0,63	0,64	0,67
Diseases of the genitourinary system	0,19	0,16	0,16	0,17	0,16	0,16	0,14	0,14
Abnormal findings	0,08	0,12	0,09	0,11	0,14	0,13	0,16	0,15
External causes of deaths	1,06	0,93	0,93	0,91	0,91	0,89	0,89	0,88
Transport accidents	0,28	0,26	0,24	0,22	0,24	0,22	0,22	0,23
Intentional self harm	0,24	0,22	0,22	0,23	0,24	0,20	0,20	0,16
Other causes of deaths	0,13	0,12	0,09	0,10	0,10	0,10	0,10	0,10
Total	13,01	12,29	12,30	11,96	12,00	11,72	11,78	11,56
				Fei	nales			
Infectious and parasitic diseases	0,02	0,02	0,03	0,02	0,03	0,03	0,03	0,04
Neoplasms	1,41	1,46	1,43	1,37	1,36	1,36	1,36	1,33
Malignant neoplasms	1,39	1,45	1,42	1,36	1,36	1,35	1,35	1,32
Endocrine, nutritional and metabolic dis.	0,13	0,13	0,13	0,12	0,12	0,13	0,11	0,11
Diabetes mellitus	0,12	0,12	0,12	0,12	0,12	0,12	0,11	0,11
Diseases of the nervous system	0,04	0,06	0,07	0,08	0,08	0,08	0,09	0,08
Diseases of the circulatory system	4,45	4,12	4,16	4,00	4,02	3,94	3,94	3,84
Hypertensive diseases	0,26	0,53	0,55	0,52	0,50	0,49	0,48	0,42
Ischeamic heart diseases	2,06	2,20	2,16	2,10	2,16	2,10	2,06	1,85
Cerebrovascular diseases	0,90	0,67	0,69	0,69	0,70	0,69	0,59	0,55
Atherosclerosis	0,76	0,35	0,37	0,32	0,27	0,27	0,47	0,66
Diseases of the respiratory system	0,52	0,35	0,33	0,35	0,38	0,34	0,35	0,33
Diseases of the digestive system	0,25	0,26	0,28	0,30	0,29	0,30	0,31	0,29
Diseases of the genitourinary system	0,13	0,09	0,10	0,10	0,10	0,10	0,09	0,08
Abnormal findings	0,05	0,05	0,04	0,05	0,07	0,06	0,05	0,05
External causes of deaths	0,33	0,22	0,20	0,19	0,20	0,21	0,21	0,18
Transport accidents	0,08	0,06	0,06	0,06	0,06	0,05	0,06	0,06
Intentional self harm	0,04	0,04	0,04	0,03	0,03	0,04	0,03	0,02
Other causes of deaths	0,10	0,10	0,08	0,12	0,10	0,09	0,08	0,08
Total	7,45	6,86	6,82	6,71	6,75	6,63	6,62	6,41

Special attention has to be given to the evident rise of the standardised mortality rate due to atherosclerosis during the years 2005 and 2006. Although mortality due to diseases of the circulatory system decreased for both sexes, atherosclerosis is an exception in this chapter of the causes of death. This development, most likely, has to be assigned to the changed classification: some deaths due to ischemic heart diseases and cerebrovascular diseases were reclassified as deaths due to atherosclerosis (Baráková, Hlava, Brašeňová, Spáčová 2005).

Tab. 5.7 Decomposition of the difference in life expectancy at birth between 2004 and 2006 by causes of death, age and sex

	0	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90 +	Total
					Males							
Neoplasms	0,00	0,01	0,00	0,01	0,02	0,02	0,06	0,03	0,00	0,01	0,00	0,15
Circulatory system diseases	0,00	0,00	0,00	-0,01	0,02	0,02	0,01	0,00	0,01	0,00	0,00	0,04
Respiratory system diseases	0,00	0,02	0,00	0,00	-0,01	0,01	0,00	0,02	-0,01	0,01	0,00	0,05
Digestive system diseases	0,00	0,01	0,00	-0,01	0,00	-0,03	-0,03	0,00	-0,01	0,00	0,00	-0,08
External causes of death	0,01	0,01	0,02	0,02	-0,02	0,00	-0,03	-0,01	0,00	0,00	0,00	0,01
Other causes of death	0,00	-0,01	-0,01	0,00	-0,03	-0,02	0,00	0,00	0,01	0,01	0,00	-0,05
Total	0,00	0,03	0,00	0,02	-0,01	0,00	0,01	0,05	0,00	0,02	0,01	0,12
	-				Females							
Neoplasms	-0,01	0,01	0,00	0,01	-0,01	0,03	-0,01	0,03	0,03	0,00	0,00	0,08
Circulatory system diseases	-0,01	0,01	0,01	0,00	0,01	0,00	0,02	0,05	0,03	-0,02	-0,01	0,09
Respiratory system diseases	0,01	0,02	0,01	0,00	0,01	-0,01	-0,01	0,00	-0,01	0,01	0,00	0,04
Digestive system diseases	0,00	-0,01	0,00	0,00	-0,01	0,00	0,00	0,00	0,01	0,01	0,00	0,00
External causes of death	0,02	0,01	0,02	0,02	-0,01	0,01	0,01	-0,01	0,00	0,00	0,00	0,08
Other causes of death	0,04	0,01	0,00	0,01	-0,01	0,01	-0,01	0,01	0,02	0,00	0,00	0,09
Total	0,06	0,06	0,04	0,03	-0,01	0,05	0,01	0,08	0,08	0,00	-0,02	0,37

Period changes in life expectancy at birth are affected by varying mortality in particular ages and causes of death. The life expectancy at birth for males increased between 2004 and 2006 in 0.12 year. Mortality decrease in ages 30 - 69 due to neoplasms contributed most significantly the increasing life expectancy. Positive trends in circulatory system diseases, respiratory system diseases, and in external causes of deaths also contributed to the favourable trend. Mortality due to digestive diseases increased and caused a decrease in the life expectancy in 0,08 years. The unfavourable trend in mortality due to external causes of death caused a decrease in the life expectancy at birth would have increased in 0.25 year during 2004 – 2006. Mortality development by age is favourable too, with an exception of ages 30 - 39. In age 30 - 39 mortality mainly due to external and other causes of death evoked life expectancy at birth decrease by 0.01 year.

Life expectancy at birth for females increased in 0.37 year during 2004 to 2006. The increase was considerably higher compared to males, and all causes of death contributed positively to the prolonging life span. Negative contribution was recorded only by age, namely at age 30 - 39 and at 90 and more.

15 % of all deaths can be assigned to smoking

It is well-known that smoking has ill effects. Besides the physical and psychical restrictions it can cause chronic and fatal illnesses. Naturally, the range of damage depends on the tobacco quantity, quality and on the frequency of smoking. The tobacco smoke contains plenty of toxic substances, tar, nicotine and carbon monoxide being the most dangerous.⁷ Tar is a carcinogen, nicotine is addictive and increases cholesterol levels in blood and carbon monoxide reduces oxygen in the body.

Tobacco smoking increases a risk to fall ill for cardiovascular system diseases, respiratory system diseases and neoplasms. The highest effect is on emergence of many types of cancer, including cancer of lung, bronchi, pharynx, oral cavity, oesophagus and stomach. Tobacco smoking also negatively affects creation of ischemic heart diseases, cerebrovascular disease and atherosclerosis as well as pneumonia, bronchitis, and other lung diseases. It can cause also other biological defects, e.g. problems in gravidity and problems in cell metabolism. The passive smoking has to be mentioned as well. It is involuntary inhaling of the tobacco smoke by non-smokers. The smoke contains all mentioned harmful pollutants, but also small solid or liquid particulates, which can causes also other infectious diseases.

Direct measuring of the mortality caused by smoking is impossible in Slovakia meanwhile. Statistical reports about deaths haven't included information, which would help select smokers. For the time being we can rely only on estimations (European Commission 2007a), that are saying about 15 % of all deaths and even 25 % of all deaths due to neoplasm have caused smoking.

WHO's (Mackay, Eriksen 2002) estimation says, that 90 % of all deaths due to lung cancer, 75 % of all deaths due to pneumonia, and 25 % of all deaths due to ischemic heart disease caused by smoking tobacco. If we took in account this percentage, in 2006 in Slovakia would die approximately 6800 persons due to three mentioned causes of death as a consequence of smoking.

By the survey (European Commission 2007a) 59 % of Slovak population is non-smoker (have never smoked) and 15 % used to smoked but have stopped (1 % unspotted). 93 % of all smokers are smoking in average 12.2 cigarettes per day. 20 % of

⁷ Other dangerous components of tobacco smoke by WHO: acetone, ammonia, arsenic, butane, cadmium, DDT, hydrogen cyanide, methanol, naphthalene, toluene, vinyl chloride ...

daily smokers smoke less than 5 cigarettes, 24 % 5 to 9, 22 % 10 to 14, 13 % 15 to 19, 9 % 20 to 24, 5 % 25 and more; 7 % didn't mentioned the number of cigarettes.

The survey was targeted on the willingness to stop smoking too; it says that 59 % of smokers haven't tried to give up smoking in the last 12 months, 36 % have tried to give up smoking 1 to 5 times, 2 % 6 to 10 times, and other 2 % more than 10 times. Only 1 % of smokers, who have tried to give up smoking, had sought help from doctor or health professional.

Slovakia ranks within the top 15 countries with the highest adult alcohol consumption per capita in the world

Alcohol consumption is an important health factor associated with life-style and depending on society's customs. The effect of the alcohol consumption on health is not exclusively negative; however, the positive effect depends on the consumed alcohol quality and quantity. In comparison to persons who have never drunk, persons with moderate alcohol consumption (especially good quality vine) experience health benefits, concretely in case the alcohol was combined with meal (Caselli, G., Vallin, J., Wunsch, G. 2006). Moderate alcohol consumption can reduce the risk of cerebral infarction, myocardial infarction and some types of diabetes (European Commission 2007b), (Greenfacts 2004). In contrast, high alcohol consumption can affect immediate and long-term damage to heath and social life. It can lead to drunkenness, to dependency on alcohol, to depression and suicide. It can induce traffic accidents, falls, and moreover, it can induce cerebrovascular diseases, neoplasm and different liver diseases.

High alcohol consumption is specific for mainly developed countries, especially the European countries. Slovakia with pure alcohol consumption of 12.4 liters per capita⁸ ranks within the top 10 - 15 states with the highest alcohol consumption worldwide (Country profile Slovakia). This number was estimated from the recorded alcohol per capita figures. If the unrecorded per capita alcohol consumption was added (7 litres per capita), Slovakia would rank on the top of the list.

The same source shows that Slovakia is 13th worldwide in pure alcohol consumption per capita if beer is considered (5.3 litres of pure alcohol per capita)⁹ and 15th in pure alcohol consumption per capita in the form of spirit (5.4 litres of pure alcohol per capita). In case vine is taken into consideration Slovakia does not rank within the top 20 countries (1.6 litres of pure alcohol per capita). It follows that beer and spirit, which are considered more harmful compared to vine, are dominant types of the consumed alcohol in Slovakia.

Looking at the alcohol consumption frequencies by the European Commission (2007b) in the end of 2006, 75 % of the Slovak population have drunk an alcoholic drink in the past 12 months; 65 % of population have drunk an alcoholic drink in the past 30 days. Out of those who have drunk during the past 30 days, 5 % have drunk every day, 6 % 4 to 5 times per week, 14 % 2 to 3 times per week, 29 % once a week, 26 % 2 to 3 times per month and 20 % once a month. At one occasion 62 % have drunk one or two drinks, 17 % 3 to 4 drinks and 5 % 5 and more drinks.

Out of persons who have drunk at least one drink during the last 12 months, 28 % have never drunk 5 and more drinks at one occasion, 26 % have drunk 5 and more drinks on one occasion less than once a month, 19 % once a month, 16 % once a week and 10 % several times a week.

Only 5.2 % of male and 8.5 % of female population of Slovakia aged 18 and more is lifetime abstainer (Country profile Slovakia 2004). The rate of heavy and hazardous drinkers¹⁰ is 5.2 % of males and 7.9 % of females. The rate of heavy episodic drinkers¹¹ is 13.9 % of males and 2.8 % females

Mortality due to alcoholic liver disease increases

Development in mortality due to alcohol consumption can be partly addressed by examining deaths due to alcoholic liver diseases (K70, ICD - 10 code)¹². In 2006, 489 males died due to this disease, which was 1.7 % of all deaths of men. 159 females died of the same disease, which was 0.6 % of all deaths of women.

Period trends in mortality due to liver diseases show an increasing tendency for both men and women. Mortality rate due to liver diseases increased from 0.12 ‰ in 2000 to 0.17 ‰ in 2006. For females this increase was rather moderate (from 0.03 ‰ in 2000 to 0.05 ‰ in 2006). The excess male mortality decreases as the index of excess mortality shows: the indicator declined from 433 % in 2000 to 340 % in 2006. However, more then triple mortality of men compared to women is significant.

⁸ Population at age 15 and more

⁹ Czech Republic is the first in consumption (9.4 litres per capita).

¹⁰ Heavy and hazardous drinking was defined as daily consumption of 40 g or more of pure alcohol for men and 20 g or more of pure alcohol for women. For comparison 0.75 l vine contains 70 g of pure alcohol.

¹¹ Heavy episodic drinking was defined as consumption of five or more standard drinks in one sitting at least once a week.

 $^{^{12}}$ This cause of death is induced by high alcohol consumption in 100 %.

Tab. 5.8 Mortality due to alcoholic liver disease

		1995	2000	2001	2002	2003	2004	2005	2006
Deaths	Males	304	347	367	378	383	338	423	489
	Females	77	94	108	110	118	133	144	159
Standardised mortality rate	Males	0,12	0,13	0,14	0,14	0,14	0,12	0,15	0,17
	Females	0,02	0,03	0,03	0,03	0,04	0,04	0,04	0,05
Index of excess mortality (%)		600	433	467	467	350	300	375	340

Expansion in the life-span does not necessarily mean longer life in heath

Life-span in Slovakia is prolonging and deaths are shifting towards higher ages. With prolonging life-span a special attention has to be paid since it makes difference whether persons spend the extra length of life in health or in illness. Measurement is not easy and we have to deal with several problems. First, we cannot determine the exact turning point between the health and illness. It can only be estimated and it depends mainly on the knowledge, perception, and also on the subjectivity of the person evaluating the health status. From this point of view, monitoring the heath status is broadly subjective and can be run by various surveys (Kasalová, Daňková 2006).

At this moment we have at disposal the survey SILC¹³ (Ivančíková 2005). Although the survey addresses mainly the income disparities, level and structure of poverty and social exclusion, it also contains questions on the health status of respondents aged 15 and more. The survey methodology is in accordance to the methodical requirement for measuring health status of the European population created within the EHEMU project (EHEMU 2007) (Mészáros 2007). These questions are targeted at measurement of the subjective health status and healthcare services.

Mainly by social and economic conditions influence the unmet need for medical examination or treatment

The following questions are at disposal for the evaluation of the accessibility of health care services:

- Was there any time during the last 12 month, when you personally needed a medical examination or treatment, which you did not receive? "Possible answers: "Yes, at least once", "No"
- "Was there any time during the last 12 month, when you personally needed a dental examination or treatment, which you did not receive? "Possible answers: "Yes, at least once", "No"
- In the case of answer "Yes, at least once" a next questions was set:
- What was the main reason for not receiving the medical examination or treatment? "
- What was the main reason for not receiving the dental examination or treatment?

Tab. 5.9 Unmet need of medical treatment

	Yes	No
Males	6,0	94,0
Females	7,7	92,3
Reasons if "yes":	Males	Females
Could not afford to (too expensive)	24,0	35,6
Was on a waiting list	6,3	3,7
Could not take time because of work, care for children or for others	39,1	28,0
Too far to travel, no means of transport	2,6	4,8
Fear of doctor (hospitals, examination, treatment)	10,8	7,4
Wanted to wait and see if problem got better on its own	11,9	10,0
Did not know any good doctor or specialist	1,2	2,4
Other reasons	4,1	8,0

In 2006, 6 % of Slovak males needed a medical examination and could not attend it during the last 12 month before the survey. The main reason was a lack of time (39.1 %) and financial problems (24 %). On the one hand, the situation corresponds to the current style of life; on the other hand, it mirrors the current social and economic situations.

The situation is among females: 7.7 % needed medical examination and could not attend it. The main reason was a lack of finance (35.6 %) and a lack of time (28 %). If the statement the problem will solve itself is added to the reason a lack of time, we can conclude that a rather high percentage of persons do not consider the healthcare important. 20.9 % of males and 18.4 %

¹³ We used SILC 2006.

of females blame the health care institutions in the case of the unmet medical examination and treatment (the proportion is a sum of reasons: waiting list, complicated transport and disbelief in doctor).

Tab. 5.10 Unmet need for dental treatment

	Yes	No
Males	6,7	93,3
Females	6,5	93,5
Reasons if "yes":	Males	Females
Could not afford to (too expensive)	39,8	55,5
Was on a waiting list	2,0	1,4
Could not take time because of work, care for children or for others	24,9	18,7
Too far to travel, no means of transport	1,5	1,2
Fear of doctor (hospitals, examination, treatment)	19,0	13,5
Wanted to wait and see if problem got better on its own	5,9	2,9
Did not know any good doctor or specialist	1,4	1,4
Other reasons	5,5	5,5

In 2006, 6.7 % of Slovak males and 6.5 % of females needed a dental examination and could not attend it during the last 12 month before the survey. The most frequent reason was a lack of finance, 39.8 % of males and even 55.5 % of females. A lack of time and fear of doctor were other frequent reasons.

Males are more optimistic in their subjective health status perception

The next three questions of the SILC survey were used for the subjective health status rating:

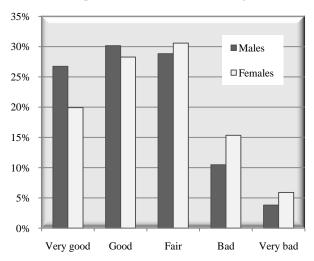
- How is you health in general? "Possible answers: "very good", "good", "fair", "bad", "very bad".
- "Do you have any chronic illness? "Possible answers: "yes", "no".
- "During the last 6 months, have you been limited because of a health problem in activities people usually do? " Possible answers: "Limited a lot", "Limited a little", "Not limited at all"

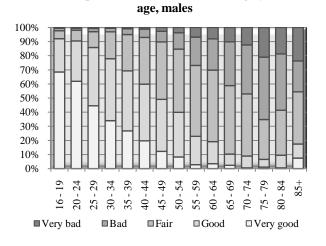
The results for the first question show, that males are rating their health status more positively than females. 85.7 % of males and 78.8 % of females does not perceive their health as bad or very bad. The largest difference is in the category "very good health", 26.7 % males have chosen this answer compared to 19.9 % females only. Also, more males than females have declared the option "good health" (30.1 % of males and 28.3 % of females). Women have prevail in categories "fair", "bad" and "very bad". We have to mention, that males are more optimistic in the evaluation of their health status and this is apparently common in other populations as well (Rychtaříková 2006).

Age is an important factor for in the subjective health rating. Young people feel most healthy in general and the proportion of persons declaring the best option declines with an increasing age: 92.1 % of males and 90.4 % of females aged 16 - 19 rate their health as "good" or "very good". Up to age 44 less than 10 % of both women and men rate their health as "bad" or "very bad".

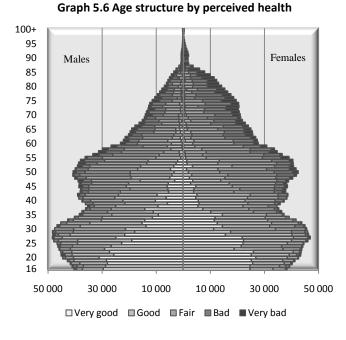
Among women, ratings "fair", "good" and "very good", which stand for positive feeling of health, evenly decline with an increasing age. For males, this tendency is interrupted at age 80 and more: even men aged 85+ give better evaluations of their health status compared to those aged 75 - 79.

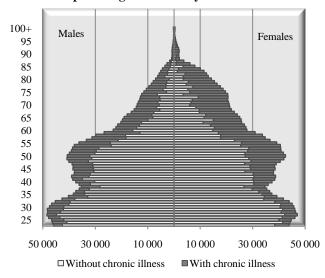
Graph 5.3 Perceived health rating



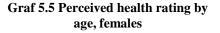


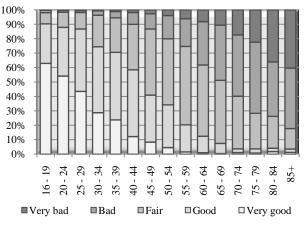
Graph 5.4 Perceived health rating by





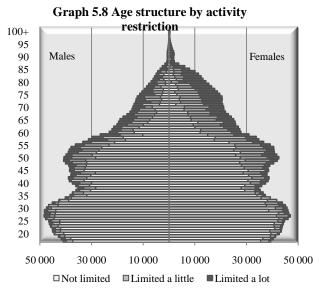
Graph 5.7 Age structure by chronic illness





Another two questions from the SILC survey address chronic diseases and activity restrictions. The population of Slovakia is divided into parts similarly to the perceived health: into persons who have reported the occurrence of chronic diseases respectively activity restrictions, and into persons who have not reported any restrictions or chronic illness. On the one hand, the occurrence of chronic diseases and activity restrictions predestine bad heath ranking, and on the other hand, persons with no restrictions in physical activities or without a chronic illness report good health. The relation between the two can be proved by correlation coefficients.

A significant correlation is between the negative answers to the existence of chronic diseases and to "very good" and "good" perceived health status rating. For males the correlation coefficient is 0.87 and for females 0.83. Similar, a significant correlation is between the negative answers to existence of activity restrictions and to "very good" and "good" perceived health status rating: the coefficient is 0.88 for males and 0.93 for females. Other significant correlations exist between the answers "activity limited a lot", "activity limited a little" and having a chronic illness, where the correlation coefficient is 0.87 for males and 0.85 for females.



Women live longer than men, but the gain they live in bad health

Age		Males				Females		
	Life expectancy	In good health	In fair health	In bad health	Life expectancy	In good health	In fair health	In bad health
16	55,2	29,2	16,6	9,4	62,8	28,3	19,2	15,3
20	51,3	25,6	16,4	9,4	58,9	24,7	18,9	15,3
25	46,5	21,2	16,1	9,3	53,9	20,3	18,4	15,2
30	41,8	17,0	15,6	9,2	49,0	16,0	17,8	15,1
35	37,0	13,2	14,7	9,1	44,1	12,3	16,8	15,0
40	32,4	9,9	13,6	9,0	39,3	8,8	15,7	14,8
45	28,0	7,0	12,2	8,8	34,5	6,0	14,2	14,4
50	23,9	4,8	10,6	8,6	29,9	4,0	12,0	13,9
55	20,1	3,0	8,8	8,3	25,5	2,3	10,0	13,2
60	16,5	2,0	7,0	7,5	21,2	1,4	7,5	12,3
65	13,3	1,3	5,2	6,9	17,1	0,8	5,3	10,9
70	10,5	0,9	3,6	6,0	13,2	0,5	3,5	9,2
75	8,1	0,7	2,2	5,2	9,8	0,4	2,1	7,4
80	6,1	0,7	1,6	3,8	6,9	0,2	1,3	5,4
85	4,5	0,5	0,9	3,0	4,6	0,1	0,6	3,8

Tab. 5.11 Life expectancy by perceived health

Proportional distribution of the population by perceived health is used in construction of the life expectancies according to the heath status by Sullivan method. The life expectancy in health returns a remaining life span at exact age x the person will live in a particular health status. The first health status category distinguished in this study indicates "Good health" which corresponds to the perceived health ranking "very good" and "good". The second category indicates "Fair health" which corresponds to the perceived health ranking "fair", and the last category is "Bad health" related to the ranking "bad" and "very bad".

In 2006, the life expectancy at age 16 for males was 55.2 years and out of these men will spend 29.2 years in good health, which was 52.9 % of the remaining life span. Another 16.6 years (30.1 %) they will live in fair health and the shortest part corresponds to the bad health 9.4 years (17.0 %).

The situation is different with females. Their life expectancy at age 16 is 62,8 years, hence longer than for men. However, females will spend only 28.3 years in good health (45.0 %). In fair health they will live 19.2 years (30.6 %) and in bad health 15.3 years (24.4 %). Males live in good health longer than females in all age 16 to 85. Females live in bad health longer in all ages compared to men. Females live longer in fair health up to age 60 and after this age it is vice-versa.

The life expectancy for females was longer compared to males in all examined age categories. At age 16 the difference was 7.7 years. Since women live in 6.2 years longer in bad health than men, it is likely that although women live on average longer than men they live the extra years in bad health.

6. MIGRATION

Two important events influenced the development of external and internal migration in the Slovak Republic: the change of the political system in Central and Eastern Europe at the turn of the 1980s and 1990s and the split of Czechoslovakia in 1993. The opening of the "iron curtain" affected the external migration to such extent that Slovakia became a country with migration gains already in 1994 (in case we disregard the incomplete evidence of emigrants in the official statistics). The changing social and economic context has also influenced migration flows within the country, i.e. the internal migration. The relationship between a city and its hinterland has transformed substantially due to the spreading suburbanisation processes.

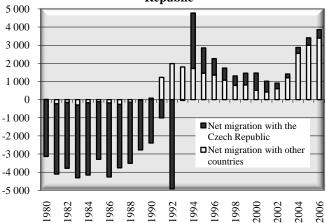
The accession of the Slovak Republic into the EU significantly affected migration processes, the external migration in particular. Free movement of people within the EU, in spite of the restrictive measures taken in several countries, intensified the migration within Europe. Migration issues have become one of the priorities of the European integration and they are reflected in domains of the EU policies such as Justice, Liberty, Security and the Enlargement of the EU. Migration challenges have a clear cross-border dimension (IOM 2006). Moreover, regional cooperation is seen as a basis of the EU integration policy and harmonized regional approaches are supported. The trends are reflected in the support of the harmonised collection of the migration data and their further processing. A great emphasis is on the comparability and mutual exchange of the migration data and a quality enhancement of these data. The latest achievements are a unification of the asylum proceedings (Dublin agreement), free movement and some principles concerning citizens of the third countries.

After the accession of the Slovak Republic into the EU the number of immigrants increases

Since the establishment of the independent Slovak Republic the maximum increase (in 4.8 thousand persons) was observed in 1994. About two third of the migrants were from the Czech Republic. The gains from external migration were decreasing afterwards to the minimum of 1000 - 900 people in 2001 – 2002. According to the records of the Statistical Office of the SR (SO SR) the share of the migrants from the Czech Republic on migration gain of the SR was 65 % in 2001; in 2005 and 2006 it reached historically lowest values of 11 % and 12 % respectively.

The number of immigrants to Slovakia (permanent residence) increased immediately after the accession into the EU. The number of immigrants increased in more than 1500 persons in 2004, irrespective of the migration from the Czech Republic. Migration gains from the other EU countries doubled compared to the era prior to 2004. This situation is closely linked to the changes in legislation after the accession into the EU. Since 2004 nationals of the other EU member

Graph 6.1 Cross-border migration of the Slovak Republic



states can easily obtain the permanent residence in Slovakia. Citizens of the third countries (non-EU countries) need the permission for their stay in Slovakia. However, the problems in emigration records still persist. The data on emigrants are underestimated and apparently the gains from migration are lower than they appear in the official statistics.

Migration	1990	1995	2000	2001	2002	2003	2004	2005	2006
Without the Czech Republic									
immigrants	944	1 558	1 006	1 033	1 563	1 953	3 473	4 132	4 4 2 5
emigrants*	867	105	501	613	962	746	924	1 139	1 029
net migration	77	1 453	505	420	601	1 207	2 549	2 993	3 396
With the Czech Republic									
immigrants	7674	1 497	1 268	990	749	650	987	1 144	1 164
emigrants*	10 073	108	310	398	449	448	662	734	706
net migration	-2399	1 389	958	592	300	202	325	410	458
Total									
immigrants	8618	3 055	2 274	2 0 2 3	2 312	2 603	4 460	5 276	5 589
emigrants*	10 940	213	811	1 011	1 411	1 194	1 586	1 873	1 735
net migration	-2 322	2 842	1 463	1 012	901	1 409	2 874	3 403	3 854
*incomplete recording	•								

 Tab. 6.1 Cross-border migration of the Slovak Republic

Until 2000, the differences in migration records were apparent when comparing the data on migration with the Czech Republic. Both countries keep migration records on the basis of permanent residence.

	1990	1995	2000	2001	2002	2003	2004	2005
Immigrants to the CR from the SR	10 073	3 845	2 826	3 078	13 326	24 385	15 788	10 133
Emigrants from the CR to the SR	7 674	140	413	8 711	14 455	18 262	21 152	1 935
Net migration	2399	3705	2413	-5 633	-1 129	6 123	-5 364	8 198

Tab. 6.2 Migration between the Czech and the Slovak Republic according to the Czech Statistical Office data

Note: In 1990, 1995 a 2000, in 2001 - 2005 permanent residence and temporary stay of foreigners (long term visa for 1 year and over)

Tables 6.1 (sector: migration with the CR) and 6.2 plot the data on mutual migration between Slovakia and the Czech Republic. It is clear that migration records differ in 1995 and 2000 despite the permanent residence was taken into account in both countries. Since 2001 the Czech Republic (unlike the Slovak Republic) included also foreigners with a temporary residence having long term visa over 90 days into the number of immigrants. The data on immigrants and emigrants according to the country of destination and country of origin have become problematic for comparison due to the changes in the Czech migration methodology. The data are not observed at disposal since 2006.

Whereas the harmonisation of migration statistics is till in progress, the comparability and interchange of the data among the EU member states are limited and in some cases even impossible.

In 2005 and 2006, the number of immigrants to Slovakia exceeded 5 thousand. The migration gains were highest since 1994 and reached 3.4 thousand in 2005 and 3.9 thousand in 2006. Year 1994 was exceptional because of the splitting Czechoslovakia followed by the exchange of citizens. It is increasingly evident that Slovakia becomes the country of destination for foreign migrants. The increasing migration gains are probably related to the foreign investments coming into the country.

	1990	1995	2000	2001	2002	2003	2004	2005	2006
Africa	32	28	33	21	35	53	55	50	51
America	117	203	192	202	235	220	252	300	268
Australia and Oceania	17	35	16	22	30	29	43	53	44
Asia	72	82	70	118	301	459	574	473	433
Europe*	8 248	2 707	1 963	1 659	1 711	1 842	3 536	4400	4 793
Total*	8 618	3 055	2 274	2 023	2 312	2 603	4 460	5 276	5 589
EÚ15**	155	304	170	243	237	237	924	1733	1781
EÚ27		1 686	1 569	1 361	1 144	1 189	2 606	3 657	4086
EFTA countries	19	67	41	38	35	51	58	109	96
Ukraine and Russia	•	499	217	156	211	234	391	320	397

Tab. 6.3 Regional structure of immigrants from abroad

* Immigrants with no information on the country of origin are added to the total number of immigrants. Data in 1990 contain migration with the CR. ** 1990 data include migration with the former GDR.

The regional structure of immigrants' according to the country of origin confirms that after the accession of Slovakia into the EU relations with other EU countries strengthened. In 2006, the proportion of immigrants from the EU countries reached 73 %. Especially the number of immigrants from the old EU member states has increased significantly from 273 in 2003 to 1781 in 2006. The growing proportion of immigrants from the EFTA countries is also evident.

The main countries of origin of immigrants are the Czech Republic that contributed 1164 immigrants (21 % of all immigrants in the SR) in 2006, followed by Germany with 674 immigrants (12 %) and Poland with 644 immigrants (11.5 %). Poland did not belong to the significant countries of origin at the beginning of the new millennium. Comparing 2005 to 2006, China, Romania and Serbia and Monte Negro left the top ten origin countries; Hungary, the United Kingdom and Italy entered the top ten list.

According to the data of the SO SR, the number of emigrants did not exceed 2 thousand people in 2006 (permanent residence is concerned). The emigrants headed mostly to the EU member states, the USA and Canada. The most frequent destination is the Czech Republic (706 emigrants in 2006, i.e. 41 % of the SR's emigrants), 235 person (13.5 %) headed to Germany, 168 to Austria, 95 to the USA, 76 to Canada, 63 to Switzerland, 60 to the U.K. and 59 to Italy. Poland follows with 32 emigrants and Ireland with 20 emigrants. The courses of emigration are closely associated with the courses of labour migration, a part of which can also end in changes of permanent residence. It is interesting that Slovakia does not have the greatest migration gains with the Czech Republic during the recent past years. In 2005, for example, Slovakia recorded greatest migration gains with Germany (439 persons) and in 2006 with Poland.

Slovakia does not register any significant losses from foreign migration with any country. However, migration losses are evident in population of women. Slovakia displays migration losses in women with Austria, Switzerland, and Canada and in several years also with Germany and the U.K. It is likely that those are women who married the nationals of these countries.

Tab. 6.4 The main countries of origin of immigrants to Slovakia

	19	990	19	95	200	0	20	01	20	02	200)3	200)4	200	5	200	6
	num	rank	num	rank	num	rank	num	rank	num	rank	num	rank	num	rank	num	rank	num	rank
Czech Republic	7674	1.	1497	1.	1268	1.	990	1.	749	1.	650	1.	987	1.	1144	1.	1164	1.
Germany ¹	62	5.	145	3.	74	4.	97	4.	86	5.	106	8.	333	3.	742	2.	674	2.
Poland	61	67.	37	12.	30	11.	26	12.	29	1516.	36	13.	216	7.	311	4.	644	3.
Hungary	33	11.	36	13.	22	16.	32	11.	30	14.	25	19.	100	12.	248	6.	342	4.
Austria	48	9.	75	7.	37	10.	49	7.	64	7.	48	12.	193	8.	325	3.	317	5.
Ukraine ²			393	2.	161	2.	124	23.	148	3.	205	3.	335	2.	251	5.	306	6.
UK	5	2528.	16	17.	23	15.	23	1415.	16	24.	33	15.	86	13.	126	12.	203	7.
Italy	7	2223.	33	15.	10	21.	19	17.	20	19.	14	24.	82	15.	123	13.	173	8.
USA	61	67.	72	8.	108	3.	124	23.	123	4.	138	6.	149	9.	187	9.	162	9.
Vietnam	24	12.	8	2526.	13	18.	13	21.	122	5.	199	4.	260	6.	92	15.	155	10.

¹ In 1990 including the former GDR

² In 1990 including the former Soviet Union

Tab. 6.5 Foreign migration by citizenship

		2005				2006	
	Immigrants	Emigrants	Net migration		Immigrants	Emigrants	Net migration
CR	709	30	679	CR	779	25	754
Germany	607	83	524	Poland	635	23	612
Poland	300	4	296	Germany	587	58	529
Austria	258	12	246	Hungary	323	5	318
Hungary	234	12	222	Austria	250	6	244
South Korea	201	0	201	Ukraine	192	4	188
France	172	0	172	UK	171	2	169
Italy	108	2	106	Italy	154	4	150
UK	106	2	104	Vietnam	146	2	144
Ukraine	92	5	87	France	131	2	129
Other	744	19	725	Other	919	44	875
Foreigners	3 531	169	3 362	Foreigners	4 287	175	4 112
SR	1745	1704	41	SR	1302	1560	-258
Total	5276	1873	3403	Total	5589	1735	3854

The Statistical Office of the SR also records migration by citizenship. It has to be pointed out again that emigration is under – reported in the SO SR statistics. Due to incomplete data on emigrants, the migration gains are only a little bit lower than the number of immigrants (when permanent residence is concerned). Nationals of the neighbouring countries and Germany prevail among the immigrants. Increasing number of nationals from the Republic of Korea in 2006 and the nationals of France in 2005 and 2006 were connected with the investments of the enterprises from these countries in Slovakia. Speaking of non-EU countries, the most numerous groups of immigrants come from Ukraine and Vietnam (192 and 146 persons).

Almost 70 % of immigrants from abroad were aged 20 - 49. Regarding the reasons for migration, a substantial part of immigrants declared the following up a family member, marriage or housing reasons. However, about 70 % of immigrants declared they have come to Slovakia "from other reasons", since it is much easier to filling in. Economic incentive was declared only marginally (4 - 5 % of immigrants).

The residence permit is needed for the third - country nationals only

It has already been mentioned that the accession of Slovakia into the EU required a lot of legislative changes that affected the field of migration. These legislative changes are mirrored in the data on foreigners with residence permits. The data are available from the Ministry of Interior of the Slovak Republic.

The accession of Slovakia into the EU was reflected in the higher number of the issued permanent residences. The increase occurred already in 2004. However, the registered residence of the EU nationals was needed in the period prior to the EU enlargement. The data in 2005 and 2006 include only the third - country nationals, who do need residence permits (whether temporary or permanent).

Out of 4321 new residence permits of the third - country nationals more than a half fell on the temporary residences. Most frequent purposes of the temporary residence permit were as follows: permits for the purpose of business (812 new stays), for

the purpose of employment (839 new stays), for studying, for activity according to special programmes and for the family reunification as well.

At the end of 2006, 4337 persons lived in Slovakia on the temporary residence permit. Most were the citizens of Ukraine (1019, i.e. 43 %), Serbia and Monte Negro (564 persons), China (536 persons), South Korea (433 persons) and USA (432 persons).

	Tab. 6.6 Nev	v residences	of foreigners	in the SR
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	1995	2000	2001	2002	2003	2004	2005*	2006*
Permanent (Act of Law No. 73/1995 Coll.)	3 688	3 620	3 843	226	0	0	0	0
Permanent (Act of Law No. 48/2002 Coll.)	0	0	0	865	1 304	6 248	1 137	1 677
Long - term	3 027	1 002	880	573	0	0	0	0
Temporary	0	0	0	2 469	2 379	1 460	1 816	2 350
Registered	0	0	0	651	852	154	0	0
Tolerated	0	0	0	15	39	219	228	294
New residences in total	6 715	4 622	4 723	4 799	4 574	8 081	3 081	4 321

* The residences of third - country nationals only. Source: Ministry of Interior of the SR.

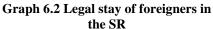
The first permits of permanent residence are granted mainly for the purpose of family reunification. In 2006 there were 8102 permanent residence permits for the third - country foreigners in Slovakia. Permanent residence permits can also be issued to so the called 'privileged foreigners', i. e. to the family members of the EU/EHP nationals, if their family member (which they depend on) has a permanent residence in Slovakia and they themselves are not a burden for the health care and social insurance. It is possible to prolong the permanent residence permit.

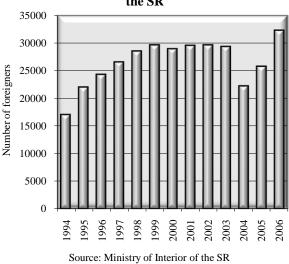
In 2006, the citizens of Ukraine (2863 persons, i.e. 35 %), then the citizens of Russia (961 persons), Vietnam (636 persons), Bulgaria (456 persons) and South Korea (404 persons) are largest groups among the foreigners with permanent residence permit in Slovakia.

A tolerated stay can be granted to foreigners in case of the following reasons: 1. there is an obstacle of their administrative expulsion, 2. they were granted a temporary shelter, 3. in case it is not possible for them to leave the country and there is no reason for their detention, 4. to the unaccompanied minors found in the territory of the Slovak Republic. In 2006 192 foreigners stayed in Slovakia on the tolerated stay; most of them were from Ukraine (45 people). The amendment of the act on the stay of foreigners in the territory of the Slovak Republic that came into the force 1.1.2007 enables the tolerated stay to be granted for the foreigners who are the victims of trafficking in human beings. The issue of the tolerated stay is in their case conditioned on their collaboration with the police that would help in revealing of criminal activities.

The EU nationals are not be granted the permanent residence permit. Their stay is considered to be permanent, if they fulfil the condition done by the Act No. 48/2002 Coll. as last amended¹⁴ (), "because the citizenship in the European Union grants every citizen of the Union fundamental and individual right for free movement and stay within the member states" (Ročenka P PZ MV SR, 2006). Thus, the EU national can be voluntarily registered at the police according to the place of permanent residence, but the registration is not obligatory. Therefore the obtained data consider only a part of the EEA citizens living in Slovakia.

At the end of 2006 there were 32153 foreigners registered in Slovakia. Out of them, 12631 persons were citizens of the third countries with residence permits (39 % of all foreigners). In 1999 -2003, the number of foreigners was relatively stable and reached about 29 thousand people. The number of foreigners declined in 2004 to 22 thousand persons. However, in 2006 the number of foreigners exceeded 30 thousand persons for the first time in the history.





¹⁴ If the citizen intends to stay in the territory of Slovakia longer than for 3 months, is engaged in employment, runs a business, studies or has the finance for the stay in the SR and he/she is not burden for the health insurance.

The Slovak Republic grants the least asylums out of all EU countries

The Slovak republic is not the country of destination for asylum seekers yet. This situation is mirrored in the number of the asylum applications. The highest number of applicants was recorded at the beginning of the new millennium, with maximum in 2004. The number of applications exceeded 11 thousand in this period. In subsequent years, however, the numbers of applications declined significantly. In 2005 25 % less persons applied for the asylum and in 2006 it was only about 33 % the applications in 2004. The decline relates to the accession of Slovakia into the EU. Since the EU accession the regulation Dublin II came into force in Slovakia. The regulation makes it possible to return the asylum seekers into the country of their first registration, i.e. to the country where he/she applied for the asylum for the first time. The regulation aims to prevent abuse in the form of multiple asylum applications in several countries of the EU. It also restricts uncontrolled movement of the foreigners within the EU member states.

The EU sets common asylum, subsidiary and temporary protection policies in all member states. The aim of these policies is to supply the third – country nationals who need international protection with a legal status and to bring the principle of non-returns into practice.

Tab. 6.7 Asylum applicants and refugees with asylum granted

Asylum applicants 33								
Asylum applicants 5.	59	1 556	8 151	9 743	10 358	11 395	3 549	2 871
Refugees with asylum granted	80	11	18	20	11	15	25	8
Refugees with the SR citizenship granted	0	0	11	59	42	21	2	4

Source: Ministry of Interior of the SR

Slovakia grants the least asylums out of all European countries. Only 8 asylums were granted in 2006 and 25 in 2005. Generally speaking, the asylum proceeding is considered to be very rigid in Slovakia. On the one hand, mostly non-governmental organisations criticise this practice. On the other hand, the asylum applicants often have no serious concern to stay in the SR since they try to move to other countries of destination (particularly into countries with more favourable economic and social conditions). For example, 1944 asylum proceeding were terminated in 2006. The highest number of applicants were from India - 727 people, 463 applicants were from Russia (from which 82 % came Chechnya), followed by Moldova with 385 applicants, Georgia with 209 applicants and Iraq with 206 applicants. Asylum was not granted to any nationals of these countries. The proceeding was terminated for 480 citizens of India and for 367 citizens of Russia. A vast majority of the asylum applicants are men (about 90 % in 2005 – 2006) and about a half of them are aged 18 to 25.

The recommendation of the EU Dublin II was in force in 2005 and 2006. Slovakia received 1676 applications for the so called "Dublin transfer" into the country. 954 applications were accepted and 437 transfers were effected. The number of application was lower by one thousand in 2006 compared to 2006; however, the number of the realised transports stayed the same. The highest number of applications was from Austria (1064 applications, i.e. almost 2/3), 182 applications were from Germany, 96 from France. Only 62 applications came from the Czech Republic. 263 transports headed from Austria to Slovakia. Most often the citizens of India, Russia, Georgia, China and Bangladesh were transferred to Slovakia. In the reverse direction, i.e. from Slovakia, 249 applications were submitted (604 applications in 2005). Most applications were directed to Poland and 40 to Austria. 33 transports were effected.

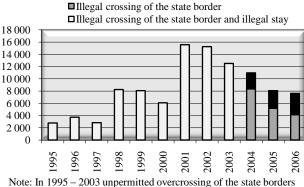
Illegal migration is mostly transient

Illegal migration covers the illegal crossing of the state border by foreigners (incl. the EU nationals) and the unauthorized stay of foreigners in the SR. Until 2004 these two components were recorded jointly.

Illegal migration is prevailingly transient. In 2006 4129 illegal immigrants crossed the Slovak borders in both directions, out of the country and into the country. The number was about one thousand less the previous year. In direction from Slovakia, most illegal migrants headed to Austria, in direction to Slovakia most illegal migrations come from Ukraine. Most illegal migrants are citizens of Moldova, India, Russia, China and Ukraine and they contribute about 2/3 to the total number of illegal migrants in 2006.

The number of people with illegal stay in the territory of the SR increased by 620 persons in 2005 compared to 2005. About one third of foreigners with unauthorized stay were the citizens of Ukraine. They usually exceed the permitted dura-

Graph 6.3 Illegal migration in the SRIllegal stay



Note: In 1995 – 2003 unpermitted overcrossing of the state borders and illegal stay were recorded jointly. Source: Ministry of Interior of the SR tion of stay and work illegally in the country. The situation is similar in case of citizens of India, Moldova, Russia and Pakistan.

Illegal migration covered 7620 persons. Illegal migration has declined since 2001. It is due to the better control of state borders, as well as due to changes in legislation of the entry and stay of foreigners in Slovakia.

The Ministry of Interior in collaboration with IOM also organise voluntary returns of the failed asylum applicants (i.e. those applicants whose application was rejected or who terminated their stay in Slovakia) and illegal migrants. In 2002 – 2006 there were 539 migrants voluntarily returned into their country of origin. Most of them were from China, Moldova and Turkey.

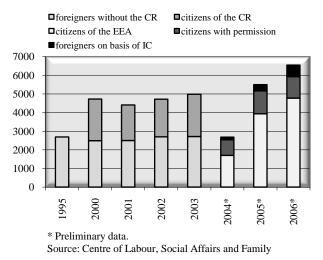
The return policy involves readmission agreements concluded on the bilateral level (there are 19 such agreements in the SR) as well as between the EU and the third countries (4 agreements). In 2006, 1711 persons were returned from Slovakia. 1670 were nationals of the third countries (1666 from Ukraine). Slovakia accepted 542 nationals from the third countries (387 from the Austrian part) (Ročenka ÚHC P PZ, 2006).

Labour migration has not been the key component of the economic development of the SR

Recently the field of migration involves also the labour migration. This migration is usually not connected with changes in permanent residence. Information on foreigners working in Slovakia is available from the recording of the Centre of Labour, Social Affairs and Family through the data on valid working permissions. These data are available in the period between the censuses.

Labour migration has not been the key component of the economic development Slovakia yet. According to the preliminary data of the Centre of Labour, Social Affairs and Family in 2005, there were only about 9 thousand foreigners working in the country (5.5 thousand employees and 3.2 thousand entrepreneurs). It is a very low number compared to the neighbouring countries¹⁵. However, due to the economic development Slovakia has become a country of destination for the labour migrants from abroad. Foreign investments are connected with the supply of the skilled labour force especially. A lack of the labour force (mainly blue-collar workers) in some industries starts being replaced by foreign workers to a certain extent. Workers are need in engineering for example. However, a lack of the work force is controversial since Slovakia still displays a high unemployment rate. A higher mobility of the Slovak labour force is required to supply the demand for workers. In the current situ a-





tion citizens of the new EU member states –Romanians and Bulgarians – are filling the free job vacancies.

The changes in legislation connected with the accession into the EU were reflected also in the method of recording the foreigners working in Slovakia. Foreigners could be employed on the basis of working permission (in cases of individual employment) and on the basis on bilateral agreements on mutual employment of citizens prior to the EU enlargement. Citizens of the Czech Republic did not need the working permission. Also the conditions for the EU citizens were mitigated step by step. After the EU accession Slovakia opened the labour market for citizens of the EU/EEA and Switzerland. The employer is obliged to report employees coming from these countries. The recording is done on the basis of the so called information cards (IC). The information cards are filled in also for those foreigners whose occupations do not require the permission. Others foreigners need the working permission besides the temporary residence permit for the purpose of employment. The exceptions are made for the asylum applicants who enter the labour market according to the special rules.

It is obvious that the EU/EEA citizens have the greatest share on the labour market. According to the preliminary data, the number of the EU/EEA citizens employed in Slovakia reached 4.8 thousand in 2006, i.e. almost ³/₄ of the employed foreigners. More than 1.1 thousand employees were from the Czech Republic, 1.0 thousand from Poland and more than 0.7 thousand from France. The largest proportion of the foreigners not obliged to have the working permit were citizens from the Republic of Korea (137 persons and 22% share), Ukraine (119 persons) and Romania (89 persons). Most foreigners obliged to have the working permit were from Ukraine (290 persons), from the Republic of Korea (237 persons) and from Romania (99 persons). In total 6.5 thousand foreigners were working in Slovakia in 2006 (not including the entrepreneurs; according to preliminary data). It was by 0.8 thousand people more compared to the previous year.

The low number of working foreigners in 2004 (2.8 thousand) probably relates to the changes in the recording. Foreigners working in the SR were mostly at aged 25 to 39 and 80 % were men. About a half of foreigners worked in Bratislava region.

It is assumed that the sources of work force will shrink in connection with the population ageing. The lack of workforce will have to be supplied from abroad. It is likely that the foreigners who will not be able to find a working position in the more developed EU countries will come to Slovakia.

¹⁵ In total 219 thousand foreigners were working in the Czech Republic in 2005 (251 thousand in 2006).

The number of Slovak nationals working abroad has been increasing

The Labour Force Survey (LFS), conducted by the Statistical Office of the SR, is the most complex data source on working emigration to abroad during the intercensal period. According to LFS, the number of Slovak nationals working abroad has been increasing. At the turn of millennium about 50 thousand Slovak nationals were working abroad; however, the number has doubled until 2004 and tripled until 2006. Moreover, the estimates were at about 200 thousand persons working abroad annually. Thus, the number of Slovak citizens working abroad is multiply higher compared to the number of foreigners working in Slovakia. It also is complicated to obtain a reliable data on work emigration abroad¹⁶.

The highest number of Slovak citizens working abroad is from Prešov region (28 %), the lowest number from Bratislava region (3.3 %). The most frequent country of destination is the Czech Republic. Slovak workers form the most numerous group of foreign workers in the Czech Republic. The number of Slovak citizens working in the Czech Republic has been increasing continuously. According to the data of the Ministry of Labour and Social Affairs and the Ministry of Industry of the Czech Republic, 68.6 thousand Slovak nationals were working in the CR in 2004. The number increased to 84 thousand in 2005 and it reached almost 100 thousand persons in 2006 (99.6 thousand). The preliminary data show about 99.7 thousand Slovak citizens working in the Czech Republic (as of 30th September 2007). Many Slovak workers are medical doctors and nurses.

Other favourite destination countries are Ireland and Great Britain. More than half the Slovak citizens are working in the industry and construction, followed by hotel and restaurant services. The problems of the great labour emigration used to be the "brain drain". It is apparent in Slovakia as well. Specialist are lacking in some branches of the industry. According to the Institute for Research of Labour and Family, 6 out of 10 university graduates wanted to work abroad after finishing their studies; even 8 out of 10 graduates in medical and pharmaceutical faculties intended to work abroad after their graduation. The research confirmed that unfavourable situation in the labour market in the less developed Slovak regions. Mostly respondents from Prešov and Nitra region intended to work abroad.

Suburbanisation processes are intensifying

Since the beginning of the new millennium the intensifying suburbanisation became a significant feature of the internal migration. Suburbanisation is typical for the big cities and their hinterlands. It is apparent in the spreading suburban areas. The suburban areas grow by the migration flows from the city itself and from the other parts of the hinterlands as well. As a result, the number of inhabitants of the suburban areas is increasing. The consequence of such development is the increasing number of people commuting daily into the city.

Tab. 6.8 Internal migration

	1990	1995	2000	2001	2002	2003	2004	2005	2006
Migrants	109 956	78 466	76 898	79 881	89 606	84 215	85 020	87 170	91 504
Migrants per 1000 population	18,2	14,6	14,2	14,8	16,7	15,6	15,8	16,2	17,0

The increasing migration in 2000 - 2002 was followed by the decrease in 2003. Since 2004 the numbers are growing again and the maximum of 91.5 thousand movements was reached in 2006. In 2006 17 out of 1000 inhabitants changed their permanent residence. It is slightly more than in 2000. The demand at the labour market has no significant influence on changes in the permanent residence of inhabitants. The movements have also been affected by the prices of housing. The high prices of housing in the cities leads to suburbanisation since people prefer commuting (also for longer distances) or a temporary stay to paying a high price for the housing in the city.

Tab. 6.9 Structure of internal migration

1990	1995	2000	2001	2002	2003	2004	2005	2006
110,0	78,4	76,9	79,9	89,6	84,2	85,0	87,2	91,5
18,2	14,1	17,3	18,1	20,3	20,2	20,4	20,4	21,7
16,6	18,0	22,5	22,7	22,6	24,0	24,0	23,4	23,7
31,8	22,2	24,3	25,0	27,5	25,0	24,7	26,0	27,4
28,9	28,3	31,6	31,3	30,7	29,6	29,1	29,8	29,9
59,9	42,1	35,2	36,8	41,8	39,1	39,9	40,8	42,4
54,5	53,7	45,8	46,1	46,7	46,4	46,9	46,8	46,3
	110,0 18,2 16,6 31,8 28,9 59,9	110,0 78,4 18,2 14,1 16,6 18,0 31,8 22,2 28,9 28,3 59,9 42,1	110,0 78,4 76,9 18,2 14,1 17,3 16,6 18,0 22,5 31,8 22,2 24,3 28,9 28,3 31,6 59,9 42,1 35,2	110,0 $78,4$ $76,9$ $79,9$ $18,2$ $14,1$ $17,3$ $18,1$ $16,6$ $18,0$ $22,5$ $22,7$ $31,8$ $22,2$ $24,3$ $25,0$ $28,9$ $28,3$ $31,6$ $31,3$ $59,9$ $42,1$ $35,2$ $36,8$	110,0 78,4 76,9 79,9 89,6 18,2 14,1 17,3 18,1 20,3 16,6 18,0 22,5 22,7 22,6 31,8 22,2 24,3 25,0 27,5 28,9 28,3 31,6 31,3 30,7 59,9 42,1 35,2 36,8 41,8	110,0 $78,4$ $76,9$ $79,9$ $89,6$ $84,2$ $18,2$ $14,1$ $17,3$ $18,1$ $20,3$ $20,2$ $16,6$ $18,0$ $22,5$ $22,7$ $22,6$ $24,0$ $31,8$ $22,2$ $24,3$ $25,0$ $27,5$ $25,0$ $28,9$ $28,3$ $31,6$ $31,3$ $30,7$ $29,6$ $59,9$ $42,1$ $35,2$ $36,8$ $41,8$ $39,1$	110,0 78,4 76,9 79,9 89,6 84,2 85,0 18,2 14,1 17,3 18,1 20,3 20,2 20,4 16,6 18,0 22,5 22,7 22,6 24,0 24,0 31,8 22,2 24,3 25,0 27,5 25,0 24,7 28,9 28,3 31,6 31,3 30,7 29,6 29,1 59,9 42,1 35,2 36,8 41,8 39,1 39,9	110,0 78,4 76,9 79,9 89,6 84,2 85,0 87,2 18,2 14,1 17,3 18,1 20,3 20,2 20,4 20,4 16,6 18,0 22,5 22,7 22,6 24,0 24,0 23,4 31,8 22,2 24,3 25,0 27,5 25,0 24,7 26,0 28,9 28,3 31,6 31,3 30,7 29,6 29,1 29,8 59,9 42,1 35,2 36,8 41,8 39,1 39,9 40,8

¹⁶ Incomplete data on migration (not connected with the changes in the permanent residence) can be obtained also from various mediatory agencies. However, many citizens of the SR find their job individually and they are not recorded Slovakia.

The structure of the internal migration was relatively stable in the past years. The changes were below 2 % annually. A short distance migration from one municipality to another within the district prevailed. However, the proportion of the short distance migration did not exceed 47 %. The proportion of migration from district to district was 30 % and less than 24 % fell on the interregional migration.

Migrants headed mostly into Bratislava region, Eastern Slovakia shows losses by internal migration

The most attractive region for migrants seems to be Bratislava region. The greatest migration flows from all regions, with an exception of Prešov and Košice region, directed to the region of Bratislava in 2006. The mutual migration flows of Prešov and Košice region have almost the same extent; 37 % of emigrants headed from Košice region to Prešov region and vice versa. In addition, about 25 % of emigrants from both regions directed to Bratislava region. Even stronger migratory relations are between Bratislava and Trnava region: 51 % of emigrants from Bratislava region headed to Trnava region and 43 % emigrants from Trnava region headed to Bratislava region. The greatest gains from internal migration were recorded in Bratislava region (2.2 thousand persons). Trnava region also gains by migration (about 1.2 thousand) and Nitra region as well (0.9 thousand). The heaviest loses were recorded in Prešov and Košice region.

Tab. 6.10 Net internal migration in the districts

				N	et migration				Crude rate of net migration
	2000	2001	2002	2003	2004	2005	2006	2000-2006	2000-2006
				Distri	icts with the	e highest rela	ative internal m	igration increase	
Senec	552	523	989	769	916	1 100	1 164	6 013	16,04
Pezinok	310	348	504	313	353	456	500	2 784	7,24
Malacky	320	332	514	521	321	502	511	3 021	6,61
Košice - okolie	292	406	656	586	336	427	407	3 1 1 0	4,09
Dunajská Streda	162	280	481	735	549	403	508	3 1 1 8	3,93
Turčianske Teplice	-6	47	31	79	60	90	80	381	3,25
Galanta	308	163	151	458	271	226	170	1 747	2,63
Skalica	37	78	102	134	95	86	38	570	1,73
Šaľa	-47	75	143	47	133	90	14	455	1,20
Lučenec	104	96	152	1	174	97	-29	595	1,16
				Distri	cts with the	highest rela	tive internal m	igration decrease	
Poprad	-163	-119	-316	-378	-517	-424	-426	-2 343	-3,21
Košice	-262	-431	-804	-829	-862	-703	-786	-4 677	-2,83
Medzilaborce	-74	-5	-17	-66	-59	-42	16	-247	-2,82
Stará Ľubovňa	-173	-125	-59	-129	-225	-106	-111	-928	-2,59
Svidník	-66	-120	-86	-106	-81	-47	-94	-600	-2,56
Snina	-65	-66	-101	-119	-94	-122	-119	-686	-2,49
Tvrdošín	-68	-53	-43	-87	-69	-114	-115	-549	-2,22
Myjava	-7	-52	-72	-81	-92	-73	-66	-443	-2,19
Gelnica	-86	-96	-54	-67	-66	-100	-1	-470	-2,18
Humenné	-164	-119	-123	-102	-145	-155	-165	-973	-2,15
Stropkov	13	18	-104	-63	-58	-68	-37	-299	-2,05
Bratislava	-582	-245	-713	-1116	-583	-200	25	-3414	-1,14

As it was already mentioned, the main trend in the internal migration has been the intensifying suburbanisation. It can be to a certain extent documented using the district data and on the data of the biggest cities – Bratislava and Košice. Bratislava and Košice display migration losses during the whole observed period. In Košice the migration losses were larger compared to Bratislava. However, the development in Bratislava suggests a reduction of migration losses since 2003. Moreover, a slight migration gain of Bratislava was recorded in 2006. It perhaps implies certain weakening of the suburbanisation processes in the future. The hinterlands of Bratislava and Košice recorded migration gains. This trend is in a sharp contrast to the migration trends before 1989. The districts surrounding Bratislava belong to the most rapidly growing districts by internal migration within Slovakia. The most outstanding representative of this type is the Senec district (in 2000 – 2006 increase of 16 persons

per 1000 population), followed by the districts of Pezinok, Malacky and Dunajská Streda, and also the Galanta district. Similar situation is in the hinterland of Košice. The district of Košice – okolie with migration increase about 4 persons per 1000 inhabitants seems to be the most rapidly growing district of the Eastern Slovakia. Similar situation is also in the hinterlands of the other bigger cities, for example of the city of Prešov, Banská Bystrica, Žilina, Nitra, etc.

Even 8 districts of the Eastern Slovakia belong to the top 10 districts with the highest migration losses by internal migration. The Poprad district recorded the greatest losses. The losses of Poprad were greater compared to the districts with a lack of investment stimuli in the northeast, such as districts Medzilaborce, Stará Ľubovňa, Svidník, etc.

There were 31 immigratory and 41 emigratory areas in Slovakia in 2000 – 2006.

	8 i	0		1					
	1990	1995	2000	2001	2002	2003	2004	2005	2006
do 199	Х	х	-106	-140	46	57	106	20	193
200-499	Х	х	1 121	741	966	634	1 249	744	1368
500-999	Х	х	1 530	2 123	2 159	2 238	2 494	2304	2753
1 000-1 999*	-13 476	-326	2 371	2 647	3 310	3 984	4 672	3482	3329
2 000-4 999	-2 864	239	1 973	1 683	2 382	2 722	2 710	2180	2938
5 000-9 999	287	77	-694	-521	-338	222	-392	-91	-558
10 000-19 999	1 612	-143	-849	-1 532	-1 188	-957	-1 147	-1336	-1453
20 000-49 999	6 098	-726	-2 520	-2 450	-2 731	-3 268	-4 201	-3173	-4412
50 000-99 999	2 164	-24	-1 982	-1 875	-3 089	-3 687	-4 046	-3227	-3397
100000 a viac	3 780	903	-844	-676	-1517	-1 945	-1 445	-903	-761

Tab. 6.11 Net internal migration by size categories of municipalities

In 1990 including the migration with the Czech Republic.

 \ast In 1990 and 1995 for municipalities with population less than 2000.

Another interesting aspect of migration is to look at migration trends in different categories of municipalities according to the number of inhabitants. Trends in migration with respect to the size of municipalities have not changed since 1995. In the mid-1990s, some categories municipalities were changing from emigratory to immigratory zones and vice versa. During the period 2000 - 2006, the smaller municipalities – up to 5 thousand inhabitants – recorded migration gains and municipalities having more than 5 thousand inhabitants recorded migration losses. It has to be emphasised that the migration losses in cities having at least 100 thousand inhabitants (Bratislava and Košice) have been declining..

Bratislava region is the most attractive in the terms of labour migration

Pattern of the labour migration within Slovakia are apparent from the data on commuting. The most complex source of the data on this spatial movement of population is census. In the intercensal period the data are available form the Labour Force Survey (LFS). According to the LFS in 2006, 127 thousand persons were not working at the place of their permanent residence within Slovakia. The trends of commuting are similar to the trends in migration by permanent residence.

Bratislava region is the most attractive within Slovakia also in the terms of job opportunities. In 2006, about 74 thousand people headed into this region. Bratislava region displays the greatest flows of commuters from the all other regions of Slovakia, except for Prešov region in 2006. Until 2005 also Košice region was an exception. Košice region is the most attractive for the economically active persons from Prešov region (11.3 thousand were working in Košice region in 2006). Conversely, most of the economically active inhabitants of Košice region commuted to Prešov region in 2005. However, in 2006 the greatest stream of commuters from Košice region directed to Bratislava region. A large number of inhabitants from Prešov region is working in Bratislava as well (about 10 thousand people in 2005 and 2006). The greatest mutual interchange of commuters is typical for Bratislava and Trnava region. On average about 30 thousand person yearly headed into Bratislava region from Trnava region. The greatest flow of workers from Bratislava region headed also into Trnava region, though the stream was lower order compared to the other direction (about 3 thousand people).

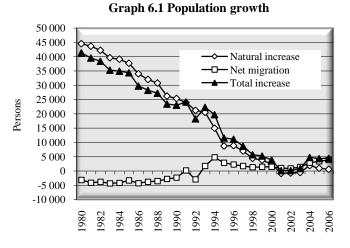
Obviously, the largest balance of commuting – the highest gain – has been in Bratislava region. Interregional commuting covers about 70 thousand jobs in Bratislava region. Košice region shows gain as well. The migration balance is at less than 5 thousand people. The others regions experienced migration losses. The largest losses in balance of commuting were in Trnava region. The losses were at 20.5 thousand people during the past years; however, the losses were higher at the beginning of millennium (about 25 thousand people). Prešov region also shows a passive balance of commuting. It reached 19.5 thousand people in 2006. Migration losses by commuting in other regions are 50 to 66 % less compared to Trnava and Prešov region.

7. TOTAL POPULATION AND POPULATION GROWTH

Until 2000, converging trends in natural change and migration were typical for the development of the total population increase in Slovakia. However, the situation has changed since 2000.

In 2001 the natural increase turned into natural decrease. The slight decline by natural change lasted until 2003. The decline was apparent in male population only. Among women the decrease was not observed yet. The decrease has turned to natural increase again in 2004. However, the increase among men was only temporary and the natural increase in 2005 and 2006 was on behalf of the female population.

Migration strongly determines the total increase of the population in Slovakia since the beginning of the 21^{st} century. Immigration drove the population growth during the years of the natural decrease (2001 – 2003). Furthermore, immigration contributed 60 to 86 % of the total population



increase during the years 2004 - 2006, when the natural increase was in positive values as well. The total annual increase of the population has been stable over the last recent years. The recorded annual total population increase ranged within 4.4 - 4.8 thousand persons. In relative terms, however, the recorded increase remains less than 1 person per thousand inhabitants.

		1990	1995	2000	2001	2002	2003	2004	2005	2006
Natural increase	Total	25 370	8 741	2 427	-844	-691	-517	1 895	955	603
	Males	10 867	3 287	67	-1 266	-1 400	-1 159	342	-172	-409
	Females	14 503	5 454	2 360	422	709	642	1 553	1 1 27	1 012
Net migration	Total	-2 322	2 842	1 463	1 012	901	1 409	2 874	3 403	3 854
	Males	-1 449	1 524	868	675	785	977	2 0 2 4	2 554	2 821
	Females	-873	1 318	595	337	116	432	850	849	1 033
Total increase	Total	23 048	11 583	3 890	168	210	892	4 769	4 358	4 4 57
	Males	9 418	4 811	935	-591	-615	-182	2 366	2 382	2 412
	Females	13 630	6 772	2 955	759	825	1 074	2 403	1 976	2 045
Natural increase	Total	4,79	1,63	0,45	-0,16	-0,13	-0,10	0,35	0,18	0,11
per 1000 population	Males	4,19	1,26	0,03	-0,48	-0,54	-0,44	0,13	-0,07	-0,16
	Females	5,36	1,98	0,85	0,15	0,26	0,23	0,56	0,41	0,36
Net migration	Total	-0,44	0,53	0,27	0,19	0,17	0,26	0,53	0,63	0,71
per 1000 population	Males	-0,56	0,58	0,33	0,26	0,30	0,37	0,77	0,98	1,08
	Females	-0,32	0,48	0,21	0,12	0,04	0,16	0,31	0,31	0,37
Total increase	Total	4,35	2,16	0,72	0,03	0,04	0,17	0,89	0,81	0,83
per 1000 population	Males	3,64	1,84	0,36	-0,23	-0,24	-0,07	0,91	0,91	0,92
	Females	5,03	2,46	1,06	0,27	0,30	0,39	0,87	0,71	0,74

Tab. 7.1 Population increase (decrease)

The number of inhabitants increases only slightly in Slovakia

The population in Slovakia increased in mere 18.7 thousand persons during the period 2000 - 2006, which is less than the annual increase in 1990 when the total population increase reached 23 thousand. During 2000 - 2006, the natural increase contributed by 1/3 to the total population increase. Among men, on the one hand, a natural decrease of 4.0 persons was recorded during the past 7 years while, on the other hand, men prevailed among immigrants (72 % of all immigrants were men).

The number of inhabitants remained unchanged: 5 393.4 thousand inhabitants lived in Slovakia on 1st January 2000 compared to 5 393.6 thousand on 31st December 2006 (the 2000 value is based on the census 1991 while the value for 2006 is based on the census 2001). Also in case the population change is related to the census 2001, the population increase remains low and the total population remains almost unchanged. The population was increasing more rapidly during 1990 – 1996, which was caused mainly by high fertility (mortality was not changing considerably at the beginning of the 1990s). Also immigration contributed to the population increase at the beginning of the 1990s. Only in 1992 emigration prevailed over immigration according to the official statistics. The number of inhabitants increased in 83.1 thousand during 1991 – 1996 (i.e. in 12)

thousand persons annually on average), but in mere 14.7 thousand during the period 2001 - 2006 (i.e. in 2.1 thousand persons annually on average). Transformation of the society, and the changed reproductive behaviour in particular, influenced the low population increase in the new millennium.

Tab. 7.2	2 Number	of populat	tion
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		Population on 31.	12.	Po	pulation on 1.7.	
	Total	Males	Females	Total	Males	Females
1990	5 310 711	2 595 913	2 714 798	5 297 774	2 590 571	2 707 203
1995	5 367 790	2 613 712	2 754 078	5 363 676	2 612 229	2 751 447
2000	5 402 547	2 626 061	2 776 486	5 400 679	2 625 691	2 774 988
2001	5 378 951	2 611 921	2 767 030	5 379 780	2 612 684	2 767 096
2002	5 379 161	2 611 306	2 767 855	5 378 809	2 611 452	2 767 357
2003	5 380 053	2 611 124	2 768 929	5 378 950	2 610 872	2 768 078
2004	5 384 822	2 613 490	2 771 332	5 382 574	2 612 313	2 770 261
2005	5 389 180	2 615 872	2 773 308	5 387 285	2 614 912	2 772 373
2006	5 393 637	2 618 284	2 775 353	5 391 184	2 616 924	2 774 260

The trends in population change differ with respect to the size of the municipalities. The natural change plays an important role in small municipalities while the effect of negative migration was pronounced in larger municipalities.

Tab. 7.3 Natural increase (decrease) of population by the size groups of municipalities

	1990	1995	2000	2001	2002	2003	2004	2005	2006
Up to 199	Х	х	-307	-324	-257	-323	-315	-379	-356
200-499	х	х	-745	-1023	-1043	-977	-1050	-985	-1004
500-999	х	х	-347	-750	-697	-937	-794	-754	-779
1 000-1 999*	2 759	-2 231	-43	-590	-448	-401	-177	-398	-216
2 000-4 999	2 736	11 522	823	442	236	600	870	708	685
5 000-9 999	2 012	-4 597	381	78	124	124	271	292	237
1 0000-19 999	3 066	807	508	293	302	349	656	640	297
20 000-49 999	6 654	450	1 460	561	815	661	1 319	868	776
50 000-99 999	4 966	2184	909	873	664	445	934	638	645
100 000 and more	3 177	606	-212	-404	-387	-58	181	325	318

* In years 1990 and 1995 up to 2000 population

Municipalities with the number of inhabitants up to 1000 persons display a natural decrease in the long-run. Since 2000 the natural decrease prevailed also in the municipalities having 1000 to 1999 inhabitants. Cities with more than 100 thousand inhabitants recorded a natural decrease during 1998 – 2003.

Tab. 7.4 Net migration by the size groups of municipalities

	1990	1995	2000	2001	2002	2003	2004	2005	2006
Up to 199	х	х	-81	-133	45	54	114	44	215
200-499	х	х	1 196	810	1 018	728	1 367	863	1 520
500-999	х	х	1 673	2 254	2 239	2 380	2 668	2 534	3 018
1 000-1 999*	-13 388	272	2 518	2 825	3 452	4 161	5 014	3 859	3 714
2 000-4 999	-2 847	487	2 117	1 860	2 4 9 0	2 905	2 996	2 743	3 322
5 000-9 999	295	285	-616	-499	-290	309	-269	114	-352
1 0000-19 999	1 623	9	-774	-1 511	-1 180	-879	-876	-1 124	-1 206
20 000-49 999	6 223	-252	-2 266	-2 340	-2 628	-3 046	-3 707	-2 820	-4 007
50 000-99 999	2 193	382	-1 775	-1 767	-3 060	-3 517	-3 599	-2 654	-2 409
100 000 and more	3 579	1 659	-529	-487	-1 185	-1 686	-834	-156	39

* In years 1990 and 1995 up to 2000 population

Population decrease in municipalities with 10 thousand and more inhabitants is caused by both emigration and natural decrease. It is interesting that the growth occurred in cities having 100 thousand and more inhabitants. The number of inhabitants increased in Bratislava after 9 years of decline by emigration. The growth was caused by migration gains from abroad (+ 39 inhabitants). Migration gains and losses fluctuate in municipalities with up to 200 inhabitants. These municipalities, however, display permanent gains by migration since 2001.

Tab. 7.5 Total increase (decrease) by the size groups of municipalities

	1 990	1995	2000	2001	2002	2003	2004	2005	2006
Up to 199	Х	-830	-388	-457	-212	-269	-201	-335	-141
200-499	Х	-70	451	-213	-25	-249	317	-122	516
500-999	х	1 752	1 326	1 504	1 542	1 443	1 874	1 780	2239
1 000-1 999*	-10 629	-1 959	2 475	2 235	3 004	3 760	4 837	3 461	3498
2 000-4 999	-111	12 009	2 940	2 302	2 7 2 6	3 505	3 866	3 451	4007
5 000-9 999	2 307	-4 312	-235	-421	-166	433	2	406	-115
1 0000-19 999	4 689	816	-266	-1 218	-878	-530	-220	-484	-909
20 000-49 999	12 877	198	-806	-1 779	-1 813	-2 385	-2 388	-1 952	-3231
50 000-99 999	7 159	2 566	-866	-894	-2 396	-3 072	-2 665	-2 016	-1764
100 000 and more	6 7 5 6	2 265	-741	-891	-1 572	-1 744	-653	169	357

* In years 1990 and 1995 up to 2000 population

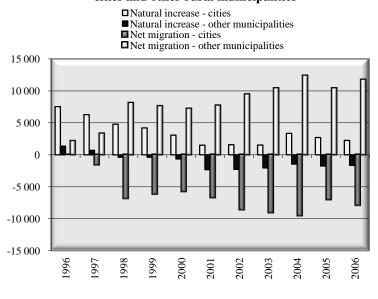
The greatest population gains display municipalities with up to 5 thousand inhabitants

Municipalities having 500 to 5000 inhabitants are typical with permanent population growth during the period 2000 – 2006, while population decrease is clearly pronounced in municipalities having 10 thousand and more inhabitants during the same period. Cities with 100 thousand and more inhabitants seem to be an exception due to recent changes in migration trends. In municipalities with least inhabitants the population decline prevails. Population gains and losses take turns in municipalities having 200 to 499 or 5000 to 9999 inhabitants. The trends in population change in municipalities by number of inhabitants are reverse compared to 1990 and 1995.

Cities having 20 000 to 100 000 inhabitants experienced the greatest population losses since 2000. The number of inhabitants in these cities decreased in 28 thousand in total. In contrast, the greatest population gains were typical for the small municipalities having up to 5000 inhabitants. These municipalities gained 46 thousand inhabitants in total.

It is also interesting to compare the structure

Graph 7.2 Natural increase and net migration in cities and other rural municipalities



of population gains in the cities and in other municipalities. The current trends emerged since 1997. The population in cities increases by natural change and decreases by emigration and the trends are reverse in other municipalities. The trends that apparent during the recent almost a decade are in strong contrast compared to the trends in the 1980s. The number of inhabitants living in cities decreased in 39 thousand since 2000 and, in contrast, the number of inhabitants in other municipalities increased in 57 thousand. During the same period, the cities lost 55 thousand inhabitants by migration (both by emigration within Slovakia and abroad). In other municipalities migration gains reached 69.5 thousand inhabitants in total. The natural increase reached less than 16 thousand in the cities and natural decrease of 12 thousand inhabitants was recorded in other municipalities.

8. POPULATION AGE STRUCTURE

Tab. 8.1 The main indicators of the population age structure¹⁷

	1990	1995	2000	2001	2002	2003	2004	2005	2006
					Total				
Number of population	5 310 711	5 367 790	5 402 547	5 378 951	5 379 161	5 380 053	5 384 822	5 389 180	5 393 637
Age group 0-14	1 330 509	1 195 288	1 036 426	1 006 970	974 991	944 456	918 915	894 308	870 622
Age group 15-44	2 418 027	2 507 086	2 519 047	2 504 417	2 500 934	2 500 224	2 501 308	2 501 850	2 501 856
Age group 45-64	1 010 780	1 077 971	1 227 504	1 254 879	1 287 011	1 315 062	1 338 650	1 360 384	1 381 520
Age group 65+	551 395	587 445	619 570	612 685	616 225	620 311	625 949	632 638	639 639
Age group 0-14 (%)	25,1	22,3	19,2	18,7	18,1	17,6	17,1	16,6	16,1
Age group 15-44 (%)	45,5	46,7	46,6	46,6	46,5	46,5	46,5	46,4	46,4
Age group 45-64 (%)	19,0	20,1	22,7	23,3	23,9	24,4	24,9	25,2	25,6
Age group 65+ (%)	10,4	10,9	11,5	11,4	11,5	11,5	11,6	11,7	11,9
Mean age	33,6	34,5	36,0	36,2	36,5	36,8	37,1	37,4	37,7
Ageing index	41,4	49,1	59,8	60,8	63,2	65,7	68,1	70,7	73,5
					Males				
Number of population	2 595 913	2 613 712	2 626 061	2 611 921	2 611 306	2 611 124	2 613 490	2 615 872	2 618 284
Age group 0-14	679 503	610 853	530 207	515 164	499 103	483 608	470 705	458 022	446 075
Age group 15-44	1 225 979	1 269 534	1 277 209	1 269 088	1 267 441	1 267 442	1 268 391	1 269 579	1 270 411
Age group 45-64	470 817	505 395	582 897	596 237	612 907	627 568	640 407	651 965	663 237
Age group 65+	219 614	227 930	235 748	231 432	231 855	232 506	233 987	236 306	238 561
Age group 0-14 (%)	26,2	23,4	20,2	19,7	19,1	18,5	18,0	17,5	17,0
Age group 15-44 (%)	47,2	48,6	48,6	48,6	48,5	48,5	48,5	48,5	48,5
Age group 45-64 (%)	18,1	19,3	22,2	22,8	23,5	24,0	24,5	24,9	25,3
Age group 65+ (%)	8,5	8,7	9,0	8,9	8,9	8,9	9,0	9,0	9,1
Mean age	32,1	33,0	34,4	34,6	34,9	35,2	35,5	35,8	36,1
Ageing index	32,3	37,3	44,5	44,9	46,5	48,1	49,7	51,6	53,5
					Females				
Number of population	2 714 798	2 754 078	2 776 486	2 767 030	2 767 855	2 768 929	2 771 332	2 773 308	2 775 353
Age group 0-14	651 006	584 435	506 219	491 806	475 888	460 848	448 210	436 286	424 547
Age group 15-44	1 192 048	1 237 552	1 241 838	1 235 329	1 233 493	1 232 782	1 232 917	1 232 271	1 231 445
Age group 45-64	539 963	572 576	644 607	658 642	674 104	687 494	698 243	708 419	718 283
Age group 65+	331 781	359 515	383 822	381 253	384 370	387 805	391 962	396 332	401 078
Age group 0-14 (%)	24,0	21,2	18,2	17,8	17,2	16,6	16,2	15,7	15,3
Age group 15-44 (%)	43,9	44,9	44,7	44,6	44,6	44,5	44,5	44,4	44,4
Age group 45-64 (%)	19,9	20,8	23,2	23,8	24,4	24,8	25,2	25,5	25,9
Age group 65+ (%)	12,2	13,1	13,8	13,8	13,9	14,0	14,1	14,3	14,5
Mean age	34,9	36,0	37,5	37,7	38,0	38,3	38,7	38,9	39,2
Ageing index	51,0	61,5	75,8	77,5	80,8	84,2	87,5	90,8	94,5

Population structure strongly determines the future societal development

Population age and sex structure are the two main demographic structures. First, demographic data are organised according to age. Second, the population age structure is a result of the main demographic and geodemographic processes. The interconnection between the demographic processes and the population structure enable for inspection of the demographic trends in the past. The current population structure is influenced by the past and present demographic developments and the future population age-structure will largely depend on the current one.

European countries experienced significant changes in the population structure as a consequence of the demographic transition. The transition has resulted in low mortality and fertility levels. Changes in population structure by sex, age, marital

¹⁷ Population on 31.12.

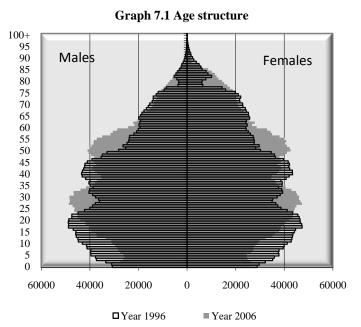
status and educational attainment are becoming ever more important pre-conditions for the future societal development and consequences of these changes are more important than change in the population size.

Irregularities in population age-structure are caused by the past population development

Population age-structure of the Slovak Republic is typical with considerable irregularities caused by the population development during the past approximately 100 years. The deformations are a result of the changing mortality and fertility primarily.

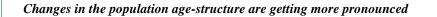
Several factors influenced the uneven trends in fertility. First, temporary critical periods such as both world wars (impact of the World War I has almost diminished until 2006) and the recession of the 1930s resulted in low fertility. These periods of crisis were followed by fertility upswings observed as baby-boom periods. Propopulation policies were among other influential factors and their effect was particularly strong during the 1970s, when the most populous cohorts were born. Abortion legislation and regulations in access to induced abortion resulting in increasing induced abortion rate were also influencing the number of births.

A rapid decline in the number of births occurred during the early 1990s. The trend has resulted in a narrowing bottom of the population pyramid. Young adults were sensitive to the socio-economic changes after the political turnover. Large cohorts of women born during the 1970s



were expected to cause a baby-boom echo during the 1990s, however, due to the changed context of reproduction this did not happen. The changed social and economic conditions prevailed over the increasing number of potential mothers in the population. The population pyramid displayed the narrowest base in 2002 when the least children were born. The expected increase in the number of births will be postponed and it will surely not reach the intensity of the previous baby-booms. As a result, the population in Slovakia will retain the typical irregular age-structure in the future.

Besides the fertility, mortality influences population age-structure importantly. Changes in mortality, namely the prolonging life expectancy and the mortality differentials, affect the shape of the population pyramid particularly in the elderly population. The elderly population increases due to improvements in mortality and the share of the elderly on the total population increases due to shrinking number of births.



The proportion of the main age groups selected with respect to reproductive age and economic activity (0 - 14, 15 - 44, 45 - 64 and 65 + years) change only slightly. One of the reasons for little changes is the broad definition of the main age groups.

The proportion of 0 - 14 year olds has been decreasing in the long-run at a varying pace. In between 1950 and 1990 it decreased in 4 % (from 29 to 25 %). However, the decrease was rapid since 1990 and the proportion of children 0 - 14 dropped to 16.1 % in 2006 (- 9 %), which is the lowest value ever recorded in Slovakia.

Population aged 15 - 44 years remains the same amount since 1990. In 2006, 46.4 % of the population of Slovakia belonged to this age group and no major changes occurred during the past 15 years.

The greatest increase in the number of persons (+370 thousand) and in the proportion on total population (+6.5 %) was recorded among 45 - 64 year olds. Large baby-boom cohorts born during the 1950s moved into this age group and smaller cohorts born over the 1960s did not reach the age to influence the proportion yet.

Decline of live born children impacts the proportion of children in the population

	1990	1995	2000	2001	2002	2003	2004	2005	2006
				Num	ber of population	on			
Total	1 330 509	1 195 288	1 036 426	1 006 970	974 991	944 456	918 915	894 308	870 622
0	79 103	60 843	54 741	50 861	50 519	51 384	53 451	54 110	53 637
1-4	328 214	289 226	230 835	223 787	216 754	210 819	206 530	206 033	209 308
5-9	446 486	401 231	349 770	332 869	316 888	301 123	290 945	283 853	274 714
10-14	476 706	443 988	401 080	399 453	390 830	381 130	367 989	350 312	332 963
				Proportion or	n the total popu	lation (%)			
Total	25,1	22,3	19,2	18,7	18,1	17,6	17,1	16,6	16,1
0	1,5	1,1	1,0	0,9	0,9	1,0	1,0	1,0	1,0
1-4	6,2	5,4	4,3	4,2	4,0	3,9	3,8	3,8	3,9
5-9	8,4	7,5	6,5	6,2	5,9	5,6	5,4	5,3	5,1
10-14	9,0	8,3	7,4	7,4	7,3	7,1	6,8	6,5	6,2

Tab.	8.2	Young	population	within	age 1	5 by age
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The impact of the population trends after 1989 is pronounced in a rapid decline of live-births, which is apparent in all age groups below age 15. The impact is most visible in the low number of young children and children in pre-school age. During 1990 – 2006 the number of children aged 0 - 2 years decreased in 33 %, children aged 3 - 5 years in 40 % and finally the number of children aged 6 to 9 dropped in 38 %. The decline occurred also among 10 - 14 year-olds (-30 %). Altogether, the number of children 0 - 14 decreased in approximately 35 % to the new minimum of 16.1 % (870 thousand) between 1990 and 2006.

Increase in the proportion and number of the elderly is not rapid so far

Tab. 8.3 The structure of elderly population
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	1990	1995	2000	2001	2002	2003	2004	2005	2006
				Numl	ber of populatio	n			
Total	551 395	587 445	619 570	612 685	616 225	620 311	625 949	632 638	639 639
65-69	219 774	209 918	201 881	195 771	191 411	190 646	192 131	195 787	200 597
70-74	110 652	181 378	176 285	174 766	176 191	174 922	172 765	170 419	167 211
75-79	111 316	83 384	137 300	135 360	134 082	133 094	133 604	135 238	136 136
80-84	70 710	68 923	54 563	64 638	75 556	85 596	88 226	89 256	89 149
85+	38 943	43 842	49 541	42 150	38 985	36 053	39 223	41 938	46 546
				Proportion on	the total popul	lation (%)			
Total	10,4	10,9	11,5	11,4	11,5	11,5	11,6	11,7	11,9
65-69	4,1	3,9	3,7	3,6	3,6	3,5	3,6	3,6	3,7
70-74	2,1	3,4	3,3	3,2	3,3	3,3	3,2	3,2	3,1
75-79	2,1	1,6	2,5	2,5	2,5	2,5	2,5	2,5	2,5
80-84	1,3	1,3	1,0	1,2	1,4	1,6	1,6	1,7	1,7
85+	0,7	0,8	0,9	0,8	0,7	0,7	0,7	0,8	0,9

The trends in the elderly population (65+) are in contrast to the change in young population. The increase of the number and proportion of the elderly population is not rapid so far. Compared to 1990, the proportion increased in mere 1.5 %, i.e. 88 thousand respectively, and it reflects shifting small cohorts born in the 1920s and 1930s over the age spectrum 65+ during the years 1990 – 2006. On the one hand, the impact of the least populous cohorts born over the World War One is diminishing. On the other hand, large cohorts born during the 1919 – 1921 are influencing the number and proportion of the oldest-old (85+) in population.

The development among 65 - 69 and 70 - 74 year-olds has an opposing tendency: the proportion of the young elderly remains stable despite the slight increase in 2006 compared to 2005, while the latter group shows a decline. The development is conditioned by the cohorts born over the 1930s crisis shifting throughout the age spectrum of the younger towards older elderly

Feminisation of ageing is caused mainly by mortality differentials between men and women

In general, boys prevail over girls among the live-born children in every population. However, the excess of men is reduced with an increasing age. Women outnumber men starting at about age 45 in Slovakia (at age 48 in 2006). Differences in mortality between men and women underlay the process. Life expectancy is higher for women compared to men in all age groups in Slovakia. Men suffer excess mortality. Number of women is double the men among 80 - 84 year olds and in more advanced age this difference increases further. As a result, women dominate in the age groups of the elderly.

	1990	1995	2000	2001	2002	2003	2004	2005	2006
				Ν	fales (%)				
Total	39,8	38,8	38,1	37,8	37,6	37,5	37,4	37,4	37,3
65-69	42,6	42,0	41,9	41,7	41,6	41,5	41,5	41,7	41,8
70-74	41,2	39,3	38,8	38,8	38,8	38,9	38,9	38,9	38,8
75-79	39,1	37,6	35,6	35,4	35,3	35,3	35,3	35,4	35,4
80-84	35,4	35,0	34,1	33,3	32,9	32,4	32,0	31,6	31,5
85+	30,8	29,8	30,8	29,8	29,5	29,3	29,4	29,4	29,1
				Fe	males (%)				
Total	60,2	61,2	61,9	62,2	62,4	62,5	62,6	62,6	62,7
65-69	57,4	58,0	58,1	58,3	58,4	58,5	58,5	58,3	58,2
70-74	58,8	60,7	61,2	61,2	61,2	61,1	61,1	61,1	61,2
75-79	60,9	62,4	64,4	64,6	64,7	64,7	64,7	64,6	64,6
80-84	64,6	65,0	65,9	66,7	67,1	67,6	68,0	68,4	68,5
85+	69,2	70,2	69,2	70,2	70,5	70,7	70,6	70,6	70,9

Tab. 8.4. Proportion of men and women at age 65 and over

The dependency ratios are decreasing

Tab. 8.5 Burden of productive population

	1990	1995	2000	2001	2002	2003	2004	2005	2006
Young age dependency ratio	38,8	33,3	27,7	26,8	25,7	24,8	23,9	23,2	22,4
Old age dependency ratio	16,1	16,4	16,5	16,3	16,3	16,3	16,3	16,4	16,5
Total age dependency ratio	54,9	49,7	44,2	43,1	42,0	41,0	40,2	39,5	38,9

The economic dependency ratios display a decreasing trend during the whole period 1990 – 2006. The number of dependent persons within age 15 and aged 65+ per 100 persons in productive age decreased in 16 to 39 persons comparing 1990 and 2006. The main factor is a rapidly decreasing number of births combined with only slightly increasing number of the elderly. Moreover, populous cohorts born in the 1970s entered the productive age (15 to 64 years) while other large cohorts born over the 1950s still are in productive age. The above mentioned trends influenced the values of other indicators as well: child dependency ratio and aged dependency ratio. While the child dependency ratio has been decreasing, the aged dependency ratio increased slightly. In 2006, the young dependency ratio reached 22 children per 100 persons in productive age and the aged dependency ratio value 16.5 persons. The differences between the two ratios have narrowed down since 1990. While children contributed by 70 % to the economic dependency ratio in 1990, it was only 58 % in 2006. The aged dependency ratio was at 42 % in 2006..

The process of population ageing intensifies

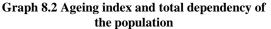
Population ageing is one of the main demographic problems. It is an inevitable consequence of the demographic transition and transformation of the society.

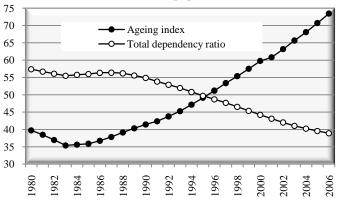
The population of Slovakia has been ageing since the late 1950s, however, the process intensified in the 1990s. Two main types of the population ageing are defined in demographic research and both of them are displayed in the shape of the population pyramid. The first process is ageing from the bottom and the second one is the ageing from the top of the population ageing from the bottom prevails as a result of the fertility decline. Population ageing from the top of the population pyramid is proceeding at a slower pace. However, the ageing from the top of population pyramid will become more pronounced in the near future as populous cohorts born over the 1950s start entering post-productive age.

Accelerating population ageing since 1990 is evident from the permanently increasing mean age of the population and the ageing index. Between 1980 and 1990 the ageing index increased in mere 2 %, during the 1990s in 18 % and between 2000 and 2006 in another 14 %. In 2006 the ageing index reached the historical maximum of 73.5 %. Even higher values are expected in the coming years since the ageing process has not finished yet and it will be continuing in the future.

The mean age of population has increased similarly to the ageing index. In 1990 it was at 33.6 years while in 2006 37.7 years. In between 1950 and 1990, hence during 40 years, the mean age of population increased in mere 3.3 years, compared to the increase in 4 years during the recent 16 years.

Tab. 8.6 Mean age development in the main age groups





	1990	1995	2000	2001	2002	2003	2004	2005	2006
0-14	7,8	7,9	8,1	8,2	8,2	8,2	8,1	8,1	8,0
15-64	37,1	37,0	37,4	37,5	37,7	37,8	38,0	38,2	38,3
65+	73,8	73,7	74,1	74,1	74,2	74,3	74,4	74,4	74,5

The ageing process is evident in all age groups and it is the most pronounced in productive age. Numerous birth cohorts born after the World War II are shifting towards the post-productive age. Moreover, also large cohorts born in the 1970s are ageing and they are being replaced with less populous cohorts born since the mid-1980s.

9. INTERNATIONAL COMPARISON

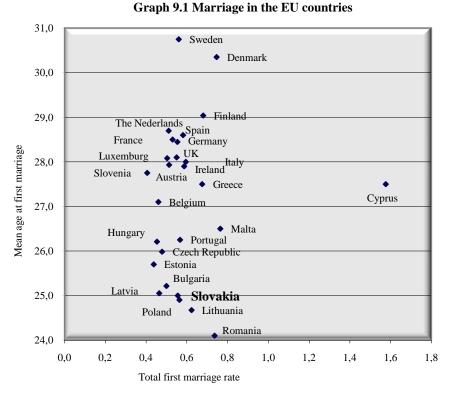
The current demographic situation in Europe is a result of the long-term historical development. Demographic trends mirror the societal changes and, hence, the demographic development has to be interpreted in close relation to the societal development.

Europe was divided into two different zones of political influence in the past and this long-term partition was influencing differences in demographic behaviour as well. The political situation changed at the beginning of the 1990s. The reproductive behaviour has changed substantially in all the transforming post-socialist countries. The current demographic trends are to some extent converging in the European countries. However, despite some converging trends several differences and specificities persist in reproduction when we look at the European countries. In this context, it is interesting to explore the position of the Slovak Republic within the EU 27 countries. For this purpose, we gathered the most up to date data for the EU 27 countries. In the analysis of the cross-country differences we focus on the position of Slovakia with EU countries in the main demographic processes.

Changes in the timing of entering marriage significantly influences first marriage intensities

Marriage and divorce are important processes largely influencing reproduction. Both the union formation and dissolution are closely associated with social norms, customs and tradition on the one hand, and with social and family policies, the labour market, taxation and legislation on the other hand. All the above mentioned factors affect the family formation and disruption with varying intensity across the countries and, consequently, complicate the international comparison. However, European countries show enough similarities to make reliable comparisons.

During the years after the World War II, marriage was widespread and almost universal. Almost 90 % of men and women entered marriage at least once in a lifetime during the 1950s and early 1960s. However, the "golden age of the family" came to its end in the Western European countries during the late 1960s and 1970. Traditional marriage has lost importance and started being replaced by cohabitation to ever greater extent. The Scandinavian countries (Sweden, Denmark, and Finland) were the forerunners of the change and the trends were later pronounced in the most Western European countries as well (Ireland being an exception).



Southern Europe differs in this respect. Although similar trends – spreading cohabitation and lower marriage intensity – emerged in the 1980s, the change was caused by different factors. Southern Europeans tend to leave the parental home at high age and hence the family formation is postponed due to this reason. Late age at leaving the parental home impacts also the low fertility levels in these countries.

Trends in the total first marriage rates and in the mean age at first marriage describe well the family formation: while the total first marriage rate of both women and men has been decreasing, the mean age at first marriage has been on the rise in European countries.

The former socialist countries experienced different trends in the family formation in the past. Low age at first marriage and high intensity of first marriage were typical for these countries until the late 1980s. On average shorter duration of schooling, high economic activity of both partners and orientation

towards the family life due to limited possibilities of self-realisation in other life domains for the majority of population were important underlying factors of the trends in family formation prior to the political turnover at around year 1990. Also the extensive pro-population policies, which in general facilitated entering marriage, affected the behaviour of the population.

After the political turnover in the former socialist countries, the first marriage intensities dropped rapidly. Previously nearly universal marriage (more than 90 % of women and men ever entered marriage) decreased to the total first marriage

levels similar to Western Europe. The postponement of marriage towards later age accompanied the decline in the total first marriage rates. The mean age at first marriage has been increasing ever since the early 1990s.

Trends in family formation are stable in the old EU countries (EU 15). The lowest intensity of marriage is in some postsocialist countries (Slovenia, Estonia, Hungary, Latvia and the Czech Republic). According to the latest available data, Malta and Cyprus show the highest first marriage intensities. Besides the extraordinary high total first marriage rate in Cyprus and Malta, Denmark, Finland, Greece, Italy and Spain display high first marriage intensities. Within the post-socialist countries, Poland and Slovakia show highest total first marriage rate according to the latest available data. Total first marriage rate is at about 55 % in all the above mentioned countries.

The most remarkable differences between the old and the new EU countries consider the timing of entering first marriage. On average youngest brides are in Romania, Lithuania and Poland (mean age at first marriage at about 25 years), as well as in Slovakia, Latvia, Bulgaria and Estonia (about 26 years). On the other side of the spectrum we find Sweden (30.7 years), Denmark (30.4 years) and Finland (29 years).

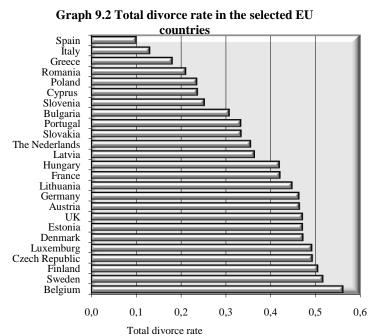
The greatest cross-country differences within Europe are in divorce

Divorce as a demographic process has negative consequences on reproduction in general. The intensity of divorce largely depends on numerous social, economic and legal factors. Laws on divorce vary a great deal among the EU 27 countries and the variations complicate the cross-country compari-

son. Also, past trends in nuptiality influence the later divorce trends.

Divorce was at a low level within Europe until the 1960s and it has been increasing since the 1970s. In the former Czechoslovakia, liberalisation of legislation on divorce and trends in family formation played an important role. High and early marriage, a considerable proportion of "shot-gun" marriages due to the premarital pregnancy and frequent living at parents' household surely affected the increasing divorce rates. However, Slovakia, unlike the Czech Republic, ranked among the countries with low divorce for a long time. The divorce increased significantly in the late 1970s. Since the 1980, periods of slight increase and stable intensity of divorce take turns.

Divorce displays the greatest cross-country differentials in the EU at the beginning of the 21st century compared to other demographic processes. According to the latest available data, Belgium, Sweden and Finland display the highest divorce rates: more than half of marriages terminate in



divorce (total divorce rate). The Czech Republic, Great Britain, Estonia and Denmark also show high levels of divorce.

Countries of the Southern Europe, Spain, Italy and Greece, are on the other extreme of the spectrum. In these countries less than 20 % of marriages end up in divorce. Other countries with low divorce intensity are Poland, Romania and Cyprus.

Malta and Ireland are specific cases within the EU. While Ireland legalised divorce only in 1997, it still is abolished at Malta.

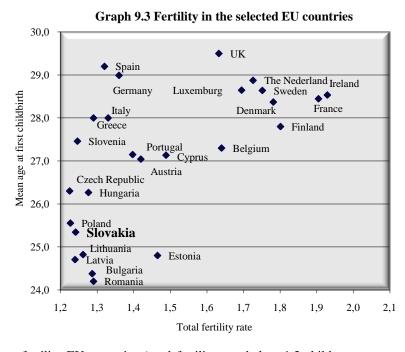
Fertility quantum and tempo have been diverging since the post-war period

Fertility counts among the main demographic process and directly influences the population development. Currently a lot of attention is given to fertility due to the low and sub-replacement levels it displays in the most EU countries. The rapid fertility decline translates into changes in the population age-structure and drives the population ageing.

Differences in fertility observed prior to the World War II disappeared during the 1950s. Fertility increased during the "golden age of the nuclear family" in the Nordic and Western European countries. In contrast, fertility decreased in Southern and Eastern European countries, which had high fertility prior to the World War II.

Fertility declined in the late 1960s first in the Nordic and later in the Western European countries. The fertility decline is usually explained by the increasing personal freedom, individualisation and spreading effective modern contraception which enhanced the postponement of childbearing. Simultaneously, the value of marriage and family has changed. Similar changes occurred in Southern Europe since the 1980s.

Fertility trends were different in the 1970s and 1980s in the socialist countries compared to the rest of Europe due to several factors. Pro-natalist population policies played an important role. These policies included measures promoting childbearing and support for the (marital) families. At the end of the 1970s Slovakia ranked among the Europeans countries having highest fertility.



Political and economic changes in the 1990s set new conditions for reproduction, and the transformation process brought a rapid fertility decline in all post-socialist countries. The decline was more rapid than it was previously observed in the Western European countries and, furthermore, the total fertility rate declined to the lowest levels. The rapid decline in fertility quantum was accompanied by the extensive changes in fertility tempo. The trends in fertility in the former socialist countries during the 1990s changed the demographic European landscape. The traditional division of Europe into the Western countries with low and late fertility model and early and high fertility prevalent in the Eastern Europe lost its empirical base.

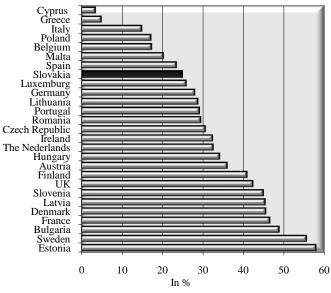
According to the latest available data, Nordic countries (Finland, Sweden and Denmark) as well as several Western European countries (France, Ireland and the Netherlands) display highest fertility levels. On the other extreme are the transforming post-socialist countries. The Czech Republic, Poland, Lithuania, Slovakia, Slovenia, Hungary, Bulgaria and Romania count among the lowest-low

fertility EU countries (total fertility rate below 1,3 children per woman). Greece also shows low fertility level. Besides the fertility quantum, substantial cross-country differences are found in fertility tempo. In the EU 27 countries, total fertility rate varies in 0.7 child per woman and the mean age at first childbearing differs in 5.3 years comparing the lowest and the highest values.

Women in Spain, Great Britain and Germany are oldest when they become mothers (mean age at first birth above 29 years). In Bulgaria, Romania, Latvia, Estonia and Lithuania women bear their first child in the lowest age on average (mean age at first birth below 25 years). Slovakia and Poland count among the countries with low mean age of mother at first birth (at abut 26 years).

The proportion of children born out of wedlock is another indicator that varies a deal within the EU 27 countries. In the past, the cross-country variations were not so large. During the 1960s up to 85 % of children in all European countries were born into marriage. During the 1970s the proportion of extra-marital births increased in some countries of Northern and Western Europe. The increase got pronounced first in the Nordic and later in the Western European countries. Extra-marital childbearing was low in the socialist countries, despite a great financial and other benefit the state granted to the single mothers, and the proportion of extra-marital children has been increasing since the 1990s. The existing cross-country variations are influenced by religiosity, cultural and societal values as well as legislation.

Graph 9.4 Proportion of extra marital births in the selected EU countries



Religiosity plays an important role and the lowest proportion of extra-marital births is in the countries where the Church influences societal values the most. Less than 5 % of children are born out of wedlock in Cyprus and Greece. The proportion is within 20 % in Italy, Poland and Malta.

20 to 35 % of children are being born out of wedlock in most EU 27 countries. Slovakia ranks among the EU countries with rather low proportion of extra-marital births. More than 50 % of births are extra-marital in the Nordic and the Baltic countries (Lithuania being the exception). France, Bulgaria and Slovenia display high proportion as well (above 45 %).

Differences in mortality within the EU stem from the previous developments

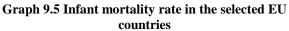
Fertility and mortality are the main demographic processes. Despite the EU countries count among the developed regions, mortality varies a great deal as a result of the previous trends. Mortality indicators show slow improvements over time.

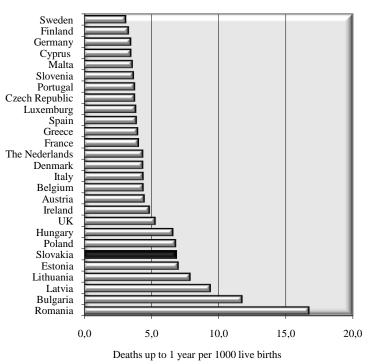
Infant mortality is an indicator expressing well the mortality level and stage in the social development of the population. Infant mortality within the EU 27 is highest in Bulgaria and Romania (above 10 ‰). The Baltic states, Slovakia, Poland and Hungary show levels slightly above the EU average (6 ‰). The lowest levels of the infant mortality are in Sweden, Finland, Germany and also at Cyprus and Malta. In total 10 EU countries display infant mortality below 4 ‰.

Life expectancy at birth is another important mortality indicator. It is a synthetic indicator taking into account mortality quantum by age usually during one calendar year.

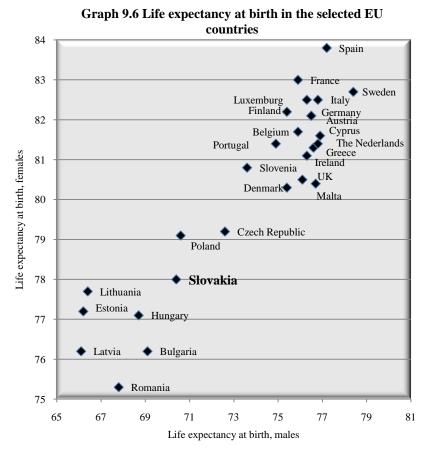
Post-socialist countries show higher mortality intensities and hence lower life expectancy at birth. The situation is worst in the Baltic states, Romania, Bulgaria, Slovakia and Hungary. Poland and the Czech Republic show a bit better mortality indicators. Slovenia converges most towards the situation in the old EU countries, however, only in the indicators for the female population.

The highest values of the life expectancy at birth are in Northern and Southern Europe. The longest average life-span for males is in Sweden, Italy and Great Britain followed by Spain, Malta, Greece and





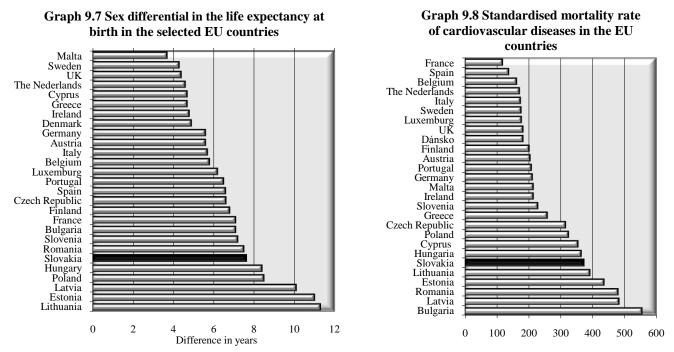
Cyprus. For females, the life expectancy at birth is longest in Italy, Spain, France, Sweden, Cyprus and Malta. The life expec-



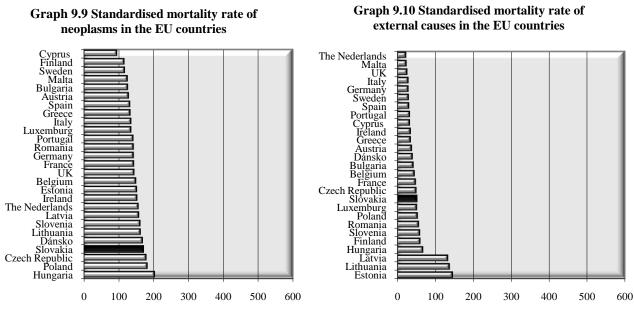
Sweden, Cyprus and Malta. The life expectancy at birth for females exceeds 80 years in 18 EU 27 countries.

The differences between the postcommunist countries and the old EU member states are significant. The difference in the life expectancy at birth for men is 12 years comparing Sweden and Latvia (a newborn male has a chance to live 78.4 years in Sweden and 66 years in Latvia). In case of females, comparing Italy, France or Spain to Latvia, Romania and Bulgaria we find the difference of 8 years. It is remarkable that men in the former socialist countries suffer higher mortality compared to the rest of EU and the situation is better for women.

Besides the values, differentials between the life expectancy at birth for men and women are important. Life expectancy at birth is higher for women in all EU countries; however, the difference varies across the countries. In the old member states (EU 15), the difference is smaller, usually within 4 - 6 years. The situation is different in the new member states and men live on average 8 - 12years shorter compared to women. The difference is greatest the Baltic states.



Causes of death are another important factor distinguished in the mortality studies. At the aggregate level, the most prevalent causes of death give information on the health status of the population. Analysis of the causes of death is important to address and explain the cross-country mortality differentials. For this purpose we apply standardised mortality rates, which enable for comparison of the cause-specific mortality rates regardless of the changes in population age-structure. Three most frequent causes of death were chosen: neoplasm, circulatory diseases and external causes of death.



Post-socialist countries, Bulgaria, Latvia, Romania and Estonia in particular, show highest mortality on circulatory diseases. Mortality due to circulatory diseases is also high in Slovakia and Lithuania. The standardised mortality rates are near the level of the Western European countries in the Czech Republic and Slovenia. France, Spain, Belgium, the Netherlands, Sweden, Denmark and the Great Britain show low mortality due to circulatory diseases. For example, the standardised mortality rate is 5 times smaller in France compared to Bulgaria.

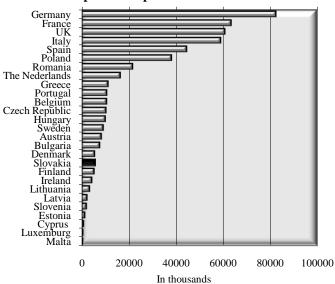
The differences are less pronounced in deaths due to neoplasm. Mortality on neoplasm is high in Hungary, Poland, Slovakia and the Czech Republic, followed by Lithuania, Slovenia and Denmark. On the other extreme we find Cyprus, Finland, Sweden and Malta. The standardised mortality rate in Hungary is double the Cyprus.

Interesting cross-country differences are found in the external causes of death. Mortality due to accidents, poisoning and suicide is highest in the Baltic states. The standardised mortality rate is two to five times the level of the countries with lowest mortality in the Netherlands, Malta, Great Britain, Italy and Germany.

Migration is dominant population growth factor in the majority of the EU countries

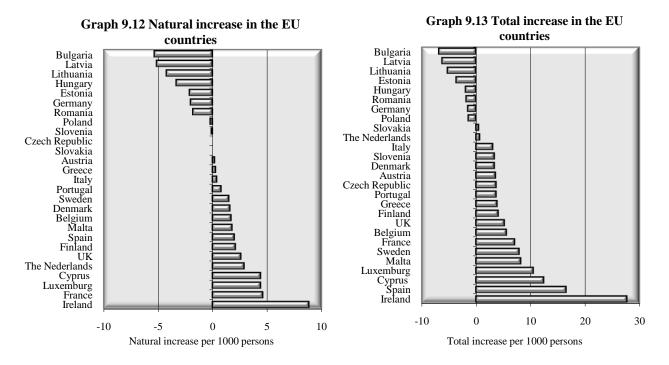
495 million inhabitants lived in the EU 27 countries on 1st January 2007. Germany is the most populous country having more than 82 million inhabitants. Germany is followed by France (63.3 mil.), the United Kingdom (60.7 mil.) and Italy (58.9 mil.). The new EU countries belong to the countries having average number of inhabitants (Romania 21.6 mil.) and smaller EU countries (Bulgaria 7.7 mil.). Slovakia (5.4 mil.) belongs to the smaller EU countries as well. Finland and Denmark have similar population size to Slovakia. Eight EU countries have less than 5 million inhabitants and three countries have less than 1 million: Cyprus (776 thousand), Luxembourg (464 thousand) and Malta (407 thousand).

In 2006, 16 out of 27 EU countries recorded population growth by natural increase and the values were highest in Ireland, France, Luxembourg and Cyprus. The natural increase was at about zero (slightly positive) in Slovakia and the Czech Republic. The rate of natural growth was below zero in 9 EU countries in 2006. Deaths outnumbered births the most in Bulgaria, the Baltic states, Hungary and Germany.



Migration compensated for the unfavourable natural change in most EU 27 countries. Majority of the EU countries recorded gains by migration in 2006. The greatest migration gains were in Ireland, Spain, Cyprus, Sweden, Malta and Luxembourg.

Most EU countries experienced total population growth in 2006. Migration played important role and the countries with high migration gains display the greatest total population increase: Ireland, Spain, Cyprus, Luxembourg and Malta. The Baltic states and Bulgaria had the largest population losses. Population losses were milder in Romania, Poland and Germany. Slova-kia gain population by both natural increase and migration gains in 2006.

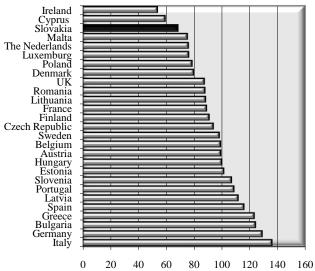


Population ageing is getting pronounced in the majority of European countries

Population ageing is the main trend in the population development in all European countries. Fertility decline is the main cause of this development. It affects the population agestructure in combination with the improving mortality expressed in the prolonging life-expectancy.

Despite all European populations are influenced by the population ageing, the intensity of the process varies within the countries as well as the stage in the process. The cross-country differences are not negligible.

The youngest populations persist in the countries with highest fertility rates. Malta, Cyprus, Ireland, and several Western European countries such as the Netherlands, Denmark and Luxembourg count within the relatively younger populations. Also several post-socialist countries, which used to have the highest fertility for longer period in the past, still have relatively younger population structure since the ageing process does not affect these populations as in other post-socialist countries (Slovakia and Poland still count among the younger populations). The ageing index is below value 80 in all the above mentioned countries (Less than 80 aged persons per 100 childron within age 15) Ireland and Currus display oven more favor



Graph 9.14 Ageing index in the EU countries

dren within age 15). Ireland and Cyprus display even more favourable ageing index of about 60.

In contrast, the most pronounced ageing process is found in the Southern European countries (Italy, Greece and Spain) and in Germany. Several post-socialist countries joint this group recently (Bulgaria, Latvia and Slovenia). In all the above mentioned countries the aged population prevails over children within age 15.

CONCLUSION

Three stages were identified in population development in Slovakia taking into account the latest two decades. First, rapid changes in reproductive behaviour and in family formation took place during the first half of the 1990s. These changes were an immediate response to the abrupt transformation of the political and social context that influenced the demographic trends to a large extent. During the second half of the 1990s is typical of the ongoing transformation processes, however, with a smaller intensity compared to the previous period. Ten years were a sufficient time for the new model of reproductive behaviour and family formation to emerge. This new model is entirely different from the one which was prevalent during state socialism. After the era of abrupt changes, the new trends and stabilisation have started since 2000 in the more stable social conditions. The population has already adjusted the reproductive behaviour to the changed conditions. Furthermore, the process of reproduction is being influenced to a larger degree by those who have grown up in the new social conditions and hence their reproductive strategies are presumably more stable.

The trend reversal and upswing in nuptiality lasted only for 3 years after the historically lowest level of nuptiality was recorded in 2001. In 2005 and 2006 nuptiality levels have dropped again. The postponement of marriage into higher age has been continuing as well. Although no reliable data on consensual unions alternative to marriage are at hand, it is evident that these are a strong alternative to marriage.

Trends in divorce have been stable since several years already: both divorce intensity and mean age at divorce have been increasing, while the average number of dependent children at divorce has been decreasing and causes of divorce are not changing. However, an increase of divorce rate to 40 % was not expected and. Quite to the contrary, a gradual stabilisation of divorce trends at the lower level than 40 % was expected taking into account the Slovak specificities (high religiousness, tradition, degree of urbanisation).

The already pronounced trends of postponement of childbearing into higher age and increasing proportion of extramarital births continued in 2005 and 2006. The proportion of extra-marital births exceeded 25 % for the first time in history in 2005. A surprising drop in fertility occurred in 2006 after the total fertility rate had been increasing in 2003 – 2005. The drop in fertility is most likely related to the deceasing intensity of nuptiality in 2005 and 2006. The unexpected development in fertility is not in accordance with the assumed gradual and long-term increase in fertility since the trend reversal in 2003.

A decreasing number as well as the intensity of spontaneous and induced abortion can be evaluated positively. In 2005 and 2006 the number of induced abortion fell below 15 thousand per year and average number of induced abortions per women in reproductive age (0.33) represents the lowest recorded level since the legalisation of induced abortion in 1957. Moreover, only 19.5 % of brought-to-term pregnancies end up in induced abortion recently, which is again a historically lowest recorded level. Furthermore, induced abortion due to medical indications stabilised at 30 % of all induced abortions. A typical applicant for the induced abortion on demand is still a married woman with two or more children. The second most numerous group of applicants are single childless women.

No radical changes have taken place in mortality trends during the latest period. Mortality keeps decreasing, which is mirrored in prolonging life expectancy at birth for both sexes. However, it is important to point at a considerable gender differences in mortality trends. A high excess mortality is still prevalent among men according to age as well as according to causes of mortality.

The current migration trends are influenced by higher intensity of movements between the Slovak republic and the rest of Europe. The number of immigrants particularly of those coming from the old EU member states has increased considerably after Slovakia joined the EU. The Czech Republic remains the main country of origin of the immigrants (21 % of all immigrants coming to Slovakia). Simultaneously, the gains from the recorded migration are increasing: in 2006 Slovakia gained 3.9 thousand inhabitants, which is more than double compared to 2003. Economic-driven immigration is not the principal factor behind the economic expansion of the Slovak Republic so far. According to the preliminary data, less than 9 thousand foreigners worked in Slovakia in 2005. Quite the contrary, number of Slovak inhabitants working abroad is estimated at about 160 thousand persons.

Population increase, both natural and by migration, is currently low. Total population increase is at 4.5 thousand inhabitants, i.e. less than 1 person per 1000 inhabitants annually. Migration has the major impact on the total population increase (more than 80 % contribution).

Population age structure is ever more important determinant of the social development. A significant decrease in the number of live-births has had the major impact on the population age structure. In contrast, the proportion of the elderly inhabitants has an increasing tendency. So far, the increase in number and proportion of the elderly is not largely pronounced in the Slovak population, however, the ageing of the population is becoming more apparent.

Regarding the position of Slovakia within the European demographic landscape, the Slovak population currently counts among the countries with the lowest fertility due to significant shifts in timing of childbearing. The changes after 1989 affected also family formation and nuptiality decreased considerably, however, Slovakia ranks among the EU 27 countries with an average intensity of nuptiality. The situation in mortality is unfavourable. Slovakia counts among the EU 27 countries having the worst mortality characteristics and the situation is worse among men compared to women.

To sum up, surely it is unwise to make hasty conclusions regarding the decrease in nuptiality lasting for the recent 2 years only. However, the latest trends in nuptiality indicate that the expected recuperation will not be straightforward and the family formation will remain the most difficult element in forecasting population trends. Several possible scenarios are open

for the future and it seems that an attitude of the young generation towards marriage and cohabitation will be crucial for the further developments.

Divorce rates have presumably reached the highest levels and the future trends largely depend on the legal praxis. In 2006 a vast majority of the divorce applications was actually turned into divorce and only future will reveal whether this will become a trend or it will be a short-term upswing only.

Despite the decrease in total fertility rate in 2006, an increase is expected in the future. The expectations are based on the assumed stabilisation of the reproductive behaviour and due to the "catching-up" of the previously postponed marriages and childbirths in the coming years. In spite of the slight increase in total fertility rate, compared to the historically lowest level recorded in 2002, Slovakia remains still among the lowest-low fertility countries. In the long run the low intensity of childbearing will be pronounced in the expected tripling proportion of women having a single child in the future (and hence in increasing proportion of families with single children). Current trends also support increasing total childlessness from the previous level of 10 % of childless women at age 50 to 17 - 20 %. These changes will influence the nature of the whole society since the previously most widespread two-child family model will loose its dominance. The proportion of families with two and more children will decrease while the proportion of smaller families will considerably increase.

In the future, both the number and intensity of induced abortion are expected to keep on decreasing slightly; however, the drop will not be as dynamic as it was during the last 15 years. The share of induced abortions on the total number of abortions remains unchanged and it suggests that the downward trend in has reached certain limits. Nevertheless, several factors can contribute to the further decrease in induced abortion. Namely, the young cohorts of women entering the reproductive age are more likely to use effective means of family planning and they are better informed not only regarding the methods of birth control, but also about the risks related to the induced abortion.

A further decrease in mortality can be expected as well. The dynamics of the decrease will largely depend on the ability of the society to fight the most prevalent fatal diseases as well as on the improvements in health care, economic and environmental conditions and, last but not least, on the measures taken to limit alcohol consumption and smoking.

Speaking of the migration trends, it is expected that the number of foreigners living in Slovakia will increase. The immigrants will presumably come mostly from the economically less developed countries. On the one hand Slovakia will be more attractive for these immigrants also due to the EU membership, and on the other hand the population development will result in the need for the labour-force in the future.

Lowering population increase will be one of the consequences of the previous and current population trends. It will result in lowering number of inhabitants and more dynamic population ageing. Immigration will partially compensate the losses caused by low fertility. In other words, population of Slovakia will become smaller, older and ethnically more diverse in the coming decades, which will have important impacts on the whole society. Particularly the population ageing brings radical challenges and surely it is becoming significant in the thinking about the future of the whole society. The most important aspects of the population ageing are an increasing burden of the economically active population to support the dependent members, increasing public expenditures on health care and social insurance, decreasing effectiveness of the pay-as-you-go retirement systems and overall changing nature of the society. Although the changes in the age composition of the Slovak population and their consequences do not seem critical at the moment, in the following decades the changes will become irreversible and more rapid. Moreover, it is not possible to eliminate or moderate the consequences of the population ageing by the isolated short-term measures and complex solutions applied sufficiently in advance should be introduced.

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