

# **POPULATION OF SLOVAKIA**

## **2002**

**Bratislava, November 2003**

**This analytical publication evaluates the population development in Slovakia for the last time period focused on the years 2000 - 2002. You can find out valuation of every section of the reproduction process and also international comparison.**

**Authors:**

Boris Vaňo – editor  
Danuša Jurčová  
Martina Lukáčová  
Ján Mészáros  
Viera Pilinská

**Layout and design:**

Ján Mészáros

**Translation**

František Bernadič

**This document has been made in INFOSTAT, Bratislava. The wording can be used only in reference to this document.**

**No language redaction has been made.**

# Contents

Contents .....	3
Introduction .....	5
1. Nuptiality .....	7
Age and gender.....	8
Marital status .....	11
Education.....	12
Order of marriage .....	12
Nuptiality by regions .....	13
2. Divorce.....	15
Age and gender.....	17
Duration of wedlock.....	18
Number of underage children.....	19
Divorces by causes .....	19
Results of divorce proceedings.....	20
Divorce by regions .....	21
3. Natality.....	23
Age of mother.....	24
Marital status .....	26
Order of births .....	27
Education.....	29
Fertility by regions .....	29
4. Abortion .....	31
Age .....	32
Abortion by regions.....	36
5. Mortality.....	37
Life expectancy at birth.....	37
Mortality during the first year of life.....	38
Age and gender.....	39
Causes of death.....	41
Mortality by regions .....	45
6. Migration.....	47
Migration across the borders of the Slovak Republic.....	47
Internal migration .....	53
7. Increase and the number of population .....	57
8. Age structure of population.....	61
Main age groups .....	63
Children component of population .....	63
Population aged 65 and over .....	64
Population ageing .....	64
Economic dependency.....	65
Age structure of population in regions .....	66
9. International comparison.....	69
Nuptiality and divorce .....	70
Natality .....	72
Mortality.....	74
Age structure of population .....	75
Conclusion .....	79
Literature.....	81



## Introduction

The publication „Population of Slovakia 2002“ refers to a similar publication published in 2000. It is the second publication of the Demographic Research Centre (DRC), which characterises the newest demographic development in Slovakia. From the time delay between the editions of both publications it is obvious that the original intention – to publish this type of publication each two years – hasn’t been kept. The reasons held mainly in problems with the recalculation of demographic data to the results from the census, which caused a shift in publishing of data on the age structure of population for 2001. However, in future we suppose to return back to the former intention, thus, to release the publication “Population development of the SR” in a two-year periodicity.

The publication is intended mainly for those, who are dealing with population problems in different aspects of the social life – from government through the local administration up to science, research and universities. However, it is devoted also to those, who would just like to be informed on the current demographic development in Slovakia and are not dealing with demography specifically.

Population development of the SR in 2002 is a complex analytical publication, which serves as the basis for a detailed evaluation of the actual demographic situation in Slovakia. The complexity of this analytical publication rests, on the one hand, in the description of all aspects of the reproductive process and, on the other hand, in the detailed description of particular demographic events. The cores of publication are basic analyses, nevertheless, the facts and data – time series of all basic and several analytical demographic characteristics are also a significant part. In comparison with the previous publication the time horizon under observation is shorter and the analytical view is deeper and more concentrated on the recent time period.

Traditionally, each demographic process is subject of one separate chapter. At the beginning of each chapter a short characterisation of the relevant demographic process before 1990 is presented, which is followed by a detailed assessment of the development from the half of nineties. The conclusion of each chapter is devoted to a brief description of regional differences<sup>1</sup>. Due to the fact that urbanisation is a significant differential factor in the demographic development, the publications includes also information on the differences between urban and rural situation.

From the time point of view, all data presented in the publication cover the period from 1995 up to 2002. For comparison reasons tables contain also data for 1990 (the beginning of the transformation period) and even for 1985 (period, when the previous model of the reproductive behaviour of population cumulated). In the chapter devoted to the international comparison, the data are expressed for the years 1990 and 2001. Thus, it is possible to compare the situation in selected countries in that time period, in which the transformation period in the SR begun, with the newest data, which are available from abroad.

All data for the Slovak Republic being used within the preparation of publication and which are presented in tables and graphs in individual chapters come from the data sources of the Statistical Office of the SR. In the chapter on migration, also data from the Ministry of Interior of the SR and the National Labour Office of the SR have been used. Data on other countries, which are presented in the chapter on international comparisons, come from the data sources of both EUROSTAT and the European Council.

Until the time of edition of this publication, the definitive data on the age structure of population for 2002 were not available, therefore, we were forced to use the preliminary data. From this reason, also the relative indicators for 2002, which are presented in the publication, are of a preliminary nature. However, the differences between preliminary and definitive data might not be significant and will not influence the analytical conclusions related to the year 2002. Within the regional assessment we had to use the data for 2001 because even preliminary data for 2002 were not available for regions.

The publication has been released in a restricted edition in both the Slovak and English versions. The publication will be distributed among the representatives of top governmental bodies, research institutions, universities and media in order to sufficiently ensure information of professional public and lay readers. The edition of the English version will allow the presentation of the demographic development in Slovakia also abroad and will create a background, which can be used in scope of international studies, projects and comparisons. Both versions are at the full extent available at the web site of Demographic Research Centre ([www.infostat.sk/vdc](http://www.infostat.sk/vdc)).

---

<sup>1</sup> More detailed information on the demographic situation in regions of the SR is to be found in another publication of DRC, “Population in the regions of Slovakia 2001”, which is being released at the same time as this publication and which characterises the demographic development even at the level of districts.



# 1. Nuptiality

**Tab. 1.1: Basic characteristics of nuptiality**

		1985	1990	1995	1996	1997	1998	1999	2000	2001	2002
Marriages		38 930	40 435	27 489	27 484	27 955	27 494	27 340	25 903	23 795	25 062
Crude marriage rate		7,54	7,63	5,13	5,11	5,19	5,10	5,07	4,80	4,42	4,66*
Total first marriage rate	Males	0,836	0,919	0,588	0,57	0,569	0,555	0,544	0,511	0,473	0,485*
	Females	0,912	0,942	0,59	0,575	0,581	0,563	0,555	0,524	0,478	0,504*
Mean age at marriage	Males	25,82	25,85	26,28	26,76	27,16	27,29	27,70	28,19	28,57	29,12
	Females	23,14	23,11	23,52	23,92	24,28	24,42	24,77	25,19	25,60	26,07
Mean age at 1. marriage	Males	x	x	24,71	24,99	25,30	25,58	25,88	26,41	26,63	27,12
	Females	x	x	22,31	22,59	22,87	23,08	23,43	23,87	24,13	24,58
Marriages of singles in %	Males	89,7	89,5	89,4	88,2	87,8	88,3	88,0	87,9	87,2	86,6
	Females	91,3	90,9	91,2	90,1	89,4	89,9	89,9	89,73	89,1	88,7

\* Preliminary data

Demography focuses on nuptiality mainly in relation to the studies of family and family behaviour of population. The background for the process of child-births and finally also for changes in the number and structure of population results from the creation of permanent or temporary, official or formal partnerships.

**Graph 1.1: Marriages and crude marriage rate**



Before 1989 the nuptiality in Slovakia was maintained at the relatively high level. The numbers of marriages in this time period moved from 28 000 up to 44 000 annually. While in Europe at the turning point of sixties and seventies the patterns of nuptiality behaviour changed and the marriages were more and more replaced by cohabitations, in Slovakia the traditional forms of partnerships even reinforced and this situation lasted until the end of eighties. The high value of marriage was externalised also by the fact that until the beginning of nineties nearly 85% of population aged less than 50 years had contracted marriage at least once and almost 93% of children were born in marriage.

By the impact of basic social changes in 1989 and the move to the market economy the nuptiality behaviour of the Slovak population changed too. The

appropriate conditions for the new possibility of self-assertion were created (business, travelling, studies etc.). However, also the increasing economic pressure, which was reflected in the growth of living costs, inflation, unemployment or the restriction in construction of dwellings, influenced the nuptiality. All these aspects started remarkably to compete with the marriage and the family establishment. Nuptiality immediately reacted to the changes in social relations – by the decrease in intensity, increase of the age at marriage and the higher occurrence of cohabitations.

The period until the half of nineties was the period of an intensive decrease of nuptiality. The crude marriage rate stabilised at the level of approximately 5,1%. The deepening of the decreasing tendency in the number of marriages was in 1970 for a short term disrupted by the impact of the increase in the intensity of nuptiality of divorced people, although the higher increase of the number of marriages was expected mainly in connection with the access of numerously powerful age groups born in seventies into the age of the highest nuptiality. However, this increase did not take place. Since 1998 the numbers of men and women contracting marriage had been reducing again and in 2001 the historically second lowest number of marriages was registered in Slovakia since 1920<sup>2</sup>. The crude marriage

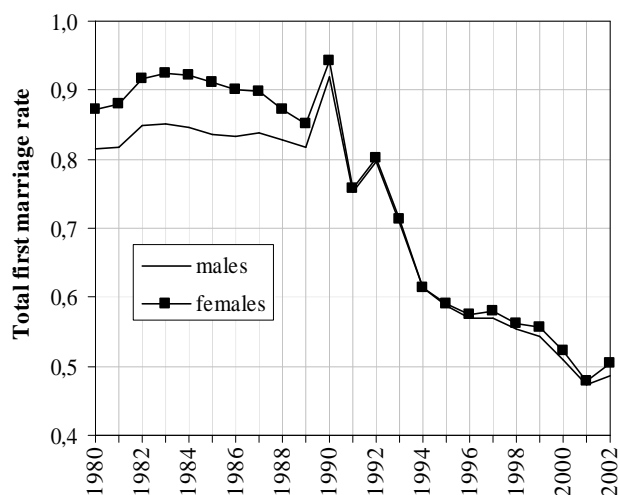
<sup>2</sup> The lower number of marriages was in Slovakia only in 1938, i.e. 23 000.

rate fell under the level of 4‰, total first marriage rate of men and women under the value of 0,5<sup>3</sup>. If the nuptiality level from 2001 was maintained, 40% of men and almost 40% of women would be permanently single (at the end of nineties it was only 15% of men and 9% of women).

In 2002, approximately 25 000 marriages were contracted. As compared to 2001, their number increased by 5,1%. Both the crude marriage rate and total first marriage rate of men and women increased as well. It can be assumed that to a higher extent the „delayed“ marriages from nineties became feasible. If we from obvious reasons do not take the year 1990 into account, this increase in the intensity of nuptiality is the first one, which after a long time can signalise a turning-point in the nuptiality development. However, to confirm this assumption a longer time period is assumed.

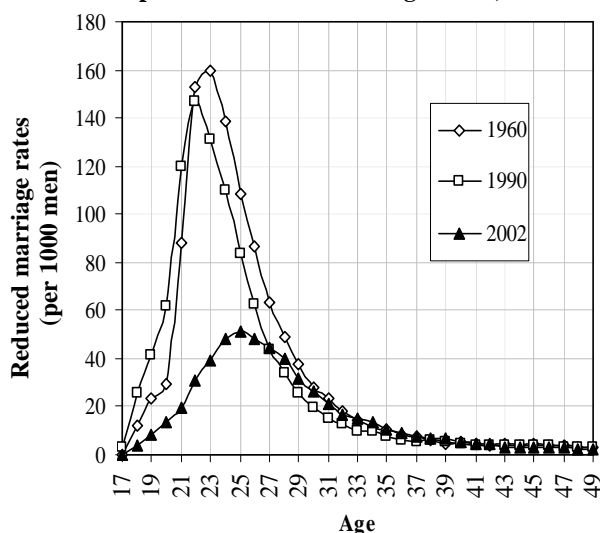
## Age and gender

**Graph 1.2 Total first marriage rate**

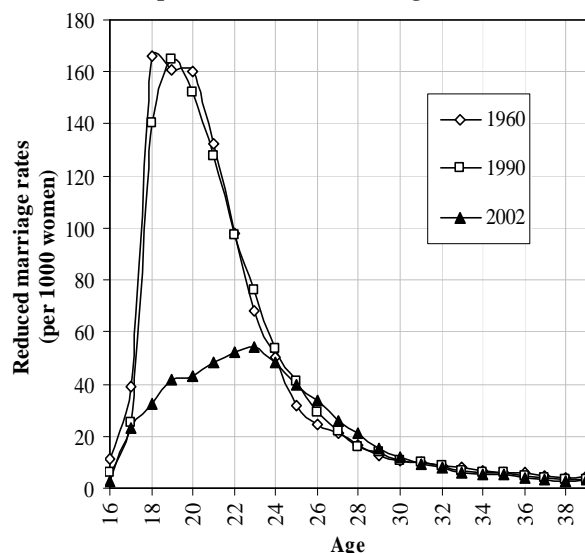


ment of maternity benefits after the end of maternity leave, etc.), which had a strong motivating and stimulating effect for the family establishment. In addition, the chance of parents to obtain an independent dwelling had been growing by a child-birth.

**Graph 1.3: Reduced marriage rates, men**



**Graph 1.4: Reduced marriage rates, women**



From the beginning of nineties, the mean age at first marriage started to grow. Also by this phenomenon the change in the demographic behaviour occurred in the Slovak population, which started gradually to move towards the advanced European countries. In 2002, the mean age at first marriage for men was 27,1 years and for women 24,6 years. In comparison with 1992, it increased nearly by 3 years equally for both genders. The mean age at marriage was developing in a similar way. In 2002 the mean age at marriage was 29,1 for men and 26,2 years for women. Also from the figures on the mean age at marriage it is visible that the remarriages are contracted more by men than

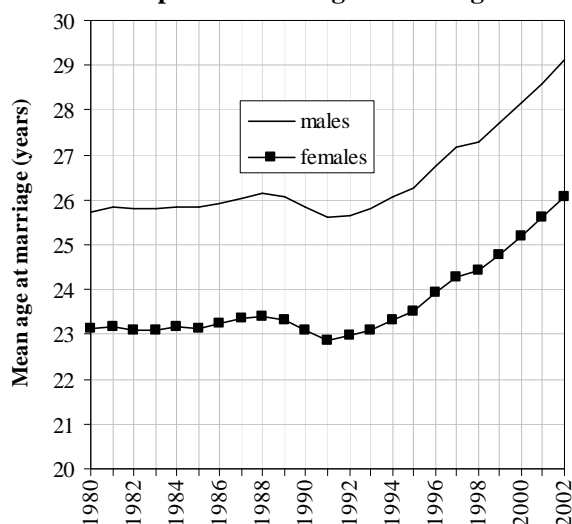
<sup>3</sup> One first marriage fell per more than two inhabitants.



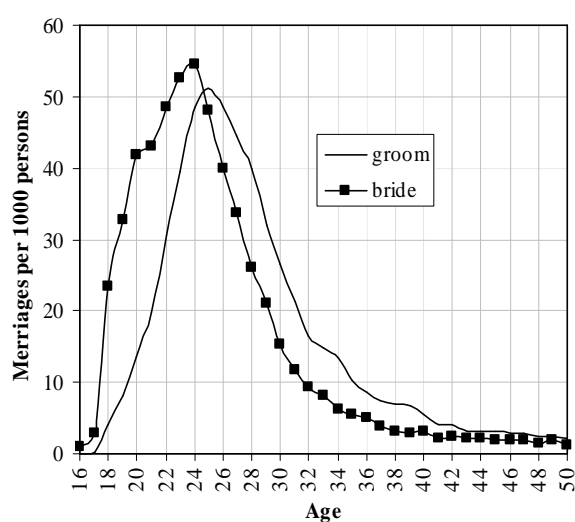
by women. It is reflected in a greater difference between mean age at marriage and at first marriage for men as compared to women.

The postponement of marriage towards the older age is related to a substantial change in the behaviour of young generation in relation to marriage. The possibilities of self-assertion, together with insufficient financial background (lack of financially bearable dwellings in the market, increase of costs of living, inflation, unemployment mainly of graduates without practise etc.), are the principal circumstances which have a big influence on such behaviour changing.

Graph 1.5: Mean age at marriage



Graph 1.6: Marriage rates by age in 2002



Tab. 1.2: Marriage rates by age (per 1000 persons)

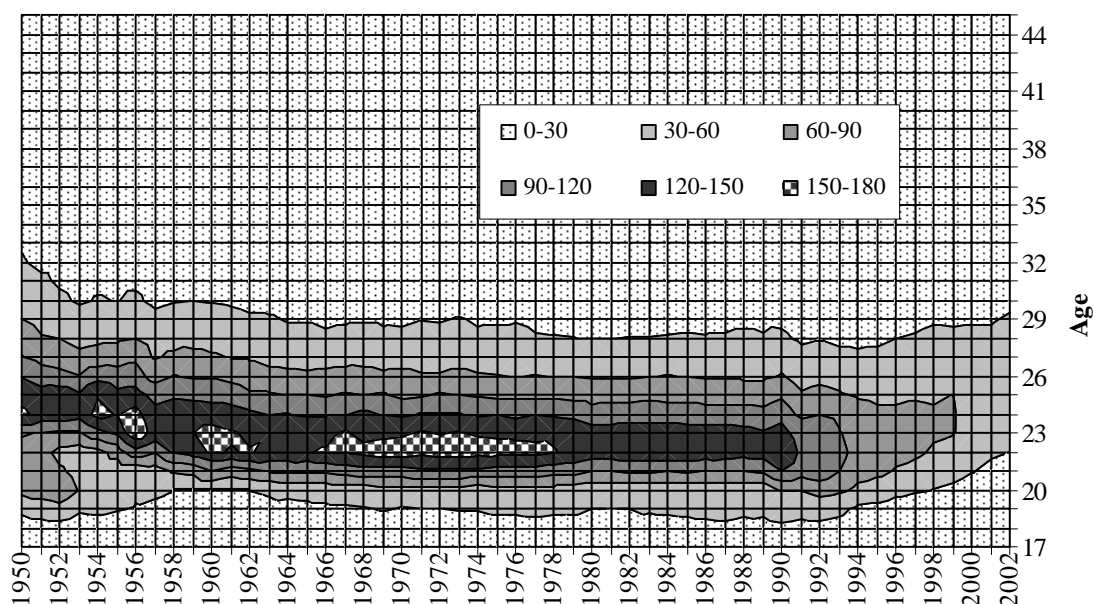
	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002*
All grooms										
15-19	12,37	12,83	6,81	5,88	4,98	4,63	4,05	3,23	2,70	2,54
20-24	102,25	113,36	65,04	59,89	56,18	51,42	46,79	39,47	33,13	30,66
25-29	46,52	49,78	36,22	38,33	40,88	41,84	43,30	42,60	40,73	43,51
30-34	11,67	13,07	11,64	12,59	13,25	14,06	14,80	16,44	16,02	18,70
35-39	5,99	6,08	5,10	5,14	6,40	6,47	6,65	6,72	6,64	7,98
40-44	3,69	4,06	2,81	3,26	3,28	3,22	3,62	3,41	3,31	3,97
45-49	3,01	3,18	2,35	2,21	2,63	2,38	2,58	2,62	2,29	2,72
50-54	1,97	2,04	1,61	2,20	2,18	2,10	2,21	2,09	2,04	2,00
55-59	1,52	1,57	1,28	1,52	1,64	1,42	1,53	1,64	1,45	1,60
All brides										
15-19	60,35	62,61	32,35	28,32	24,96	22,41	19,76	15,65	12,98	12,23
20-24	99,12	101,23	64,74	63,52	64,21	62,02	60,31	55,16	48,75	48,19
25-29	22,81	24,40	19,35	21,39	23,90	26,02	27,62	29,82	29,29	34,06
30-34	7,94	8,41	6,25	7,24	7,56	7,39	8,10	8,37	8,58	10,22
35-39	4,14	4,31	2,95	3,34	3,48	3,38	3,68	3,72	3,48	4,02
40-44	2,56	2,77	2,00	2,22	2,24	2,15	2,06	2,00	2,19	2,41
45-49	1,72	2,04	1,47	1,51	1,86	1,72	1,80	1,68	1,76	1,81
Single grooms										
15-19	12,36	12,87	6,79	5,88	4,98	4,63	4,05	3,23	2,70	2,54
20-24	101,25	112,10	64,49	59,35	55,75	51,03	46,51	39,25	32,92	30,49
25-29	42,50	45,66	33,66	35,50	38,28	39,30	41,03	40,55	39,04	41,86
30-34	7,40	8,93	8,63	9,39	9,81	10,63	11,53	13,07	12,92	15,25
35-39	2,30	2,57	2,69	2,65	3,42	3,73	3,84	4,14	3,77	4,70
40-44	0,87	0,97	0,84	0,97	0,99	1,19	1,21	1,31	1,21	1,60
45-49	0,55	0,61	0,41	0,30	0,46	0,45	0,53	0,59	0,48	0,54
Single brides										
15-19	60,21	62,54	32,32	28,29	24,94	22,38	19,75	15,63	12,98	12,23
20-24	96,52	98,63	63,41	62,10	62,64	60,93	59,29	54,34	48,15	47,54
25-29	18,69	19,92	16,37	18,23	20,49	22,61	24,53	26,77	26,64	31,26
30-34	4,42	4,67	3,96	4,31	4,44	4,46	5,17	5,43	5,67	7,00
35-39	1,72	1,69	1,24	1,30	1,47	1,37	1,50	1,73	1,41	1,70
40-44	0,65	0,79	0,52	0,61	1,87	0,53	0,48	0,54	0,54	0,73
45-49	0,24	0,27	0,27	0,24	0,33	0,26	0,30	0,30	0,30	0,29

\* Preliminary data

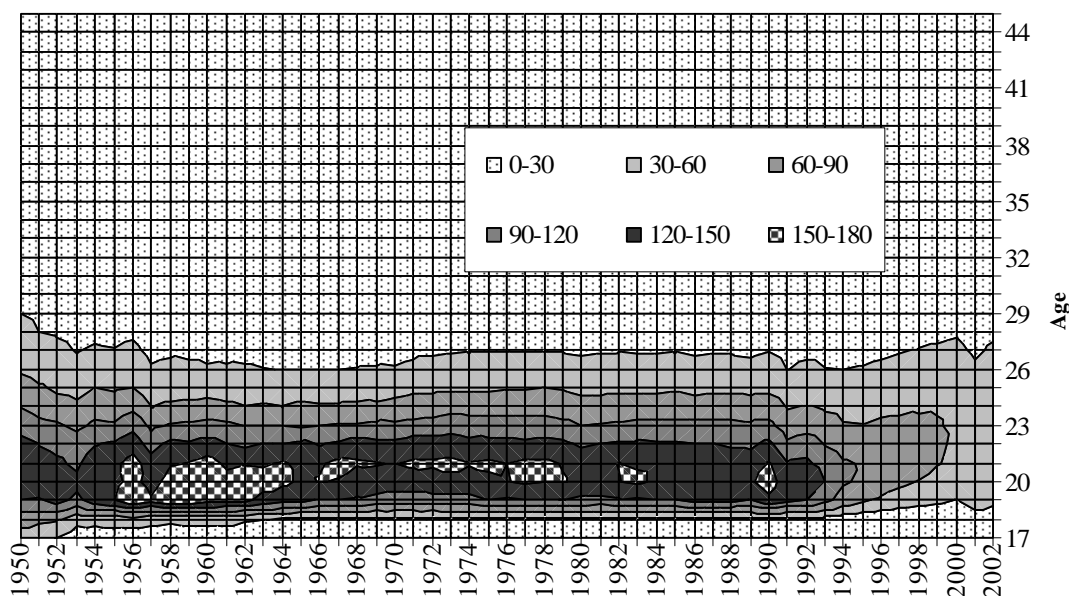
Until 1990 nearly half of all grooms or brides belonged into the age group of 20-24. Later the distribution of the age at marriage changed (mainly for men) by the impact of already mentioned increase of the age at marriage. In 2002 most of grooms (39,8%) belonged into the age group of 25-29 and 29% into the age group of 20-24. In case of brides the situation was opposite – 43,8% belonged into the group of 20-24 and 30,2% into the group of 25-29.

A concise assessment of the nuptiality behaviour of population in dependence on sex and age is available by indicators – marriage rates by age (calculated for all betrothed couples) and reduced marriage rates (calculated for single couples). Stability of the nuptiality behaviour of the Slovak population between 1960 and 1989 was reflected not only in a fixed value of total nuptiality characteristics but also in marriage rates which did not practically change. Since 1992, the decrease in marriage rates in all age groups occurred, however, the fastest one was recorded at young age groups. In 1993 and 1994 the decrease in marriage rates for all betrothed couples, as well as for singles, had intensified even to a greater extent. In 1995, a change in the development of marriage rates of people aged 25-29 occurred – the decrease was replaced by a moderate increase what could be considered as a reflection of the compensation effect, i.e. the realisation of part of postponed marriages. Externally this fact appeared as an increase of the mean age of betrothed couples.

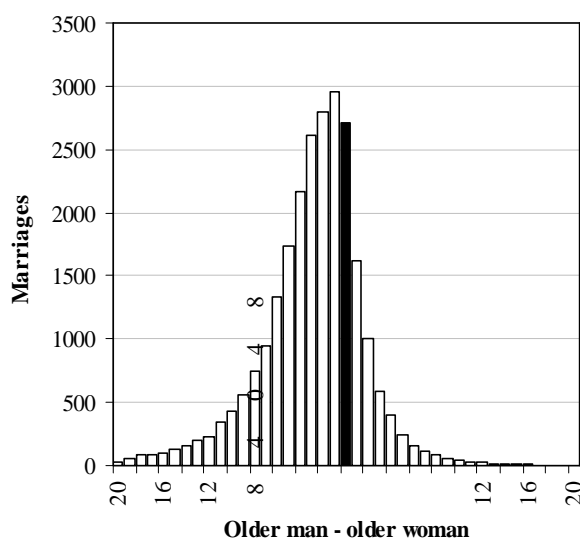
**Graf 1.7: Marriage rates of men**



**Graf 1.8: Marriage rates of women**



**Graph 1.9: Age difference at marriage in 2002**



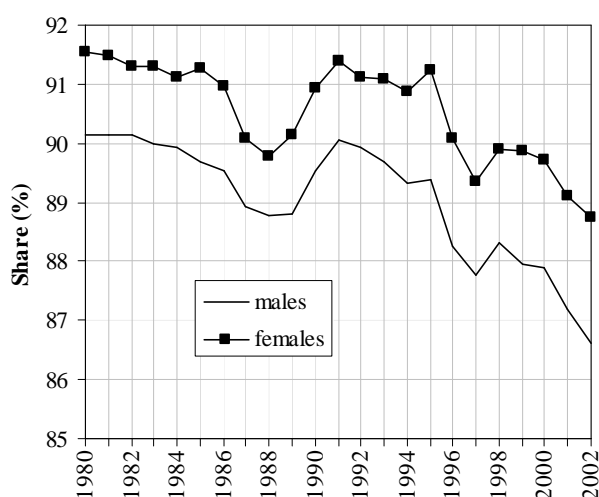
older than the bride by 3,1 years at the average.

## Marital status

**Tab. 1.3: : Marriages by marital status of betrothed couples in 2002**

		Brides				
		Single	Divorced	Widowed	Total	%
Grooms	Singles	20 474	1 170	64	21 708	86,6
	Divorced	1 680	1 330	84	3 094	12,3
	Widowed	84	118	58	260	1,0
	Total	22 238	2 618	206	25 062	100,0
	%	88,7	10,4	0,8	100,0	
	Mean age	24,58	36,93	48,25	26,07	

**Graph 1.10: Marriages of single betrothed couples**



are reaching the age of the highest nuptiality. Both, the absolute number as well as the share of divorced betrothed couples is recently increasing (in contrast to single betrothed couples). The number of divorced spouses – men was in

In 2002, the marriage rate, together with the reduced marriage rate, was the highest in case of men aged 25-29 and in case of women aged 20-24. As compared to 2001, also the values of marriage rates increased for men aged 30-34 and 25-29 and for women aged 30-34. On the contrary, the long-term fall of marriage rates in the youngest age groups, mainly up to 18, can be assessed positively, as the contracting of marriage at the very low age is undoubtedly a risky factor with regard to the stability and functioning of the wedlock. From 117 grooms and 1342 brides younger than 18 years in 1990, in 2002 their number decreased down to 13 and 163 respectively.

A relatively significant indicator, which is related to the nuptiality development in dependence on age of betrothed couples, is the age difference at marriage. At the beginning of sixties the average difference between the age of groom and bride was 3,5 years, however, it was step-by-step decreasing to the level of approximately 2,5 years at the end of seventies. From this time period the difference in age started to grow again, i.e. up to 2,7 years in 1992 and 2,9 years in 1999 and even up to 3,1 years in 2002. It means that in 2002 the groom was

From the long-term standpoint mainly the reduction in the share of singles in the total of betrothed couples is interesting in connection to marital status. With the decreasing tendency in nuptiality, the decrease in nuptiality of singles is more intensive. The growing number of singles in population increases the potential of young people in the nuptiality market, which is prevalently formed by a non-married part of powerful population age groups from the demographic wave of seventies, which is moving to the boundary of 30 years of age.

In 2002, from the total number of marriages, there were 86,6% grooms and 88,7% brides who were single. In comparison to 1995, the number of single spouses decreased evenly for both genders by 11%.

The increasing share of marriages of second and higher order is also related to the change of nuptiality behaviour of population, mainly to the postponement of marriages to the older age. That is to say that still more and more mainly divorced people

2002 the highest from the half of nineties. From 1995 their share increased by 2,6 percentage points when it reached 12,3%. Nearly the same is true for women. The share of divorced brides contracting another marriage increased from 7,9% in 1995 up to 10,4% in 2002. The share of widowed men in population had been maintained from 1995 between 0,9-1,1% and of women between 0,8-1,0%, what was not so substantial from the demographic point of view. When contracting marriage between partners, the marriages between partners with the same marital status are lingeringly prevailing. In 2002, there were 87% of such cases.

In addition to the postponement of marriages to the older age, the more and more frequent preference of cohabitation has a remarkable impact on the diminishing of the share of single couples. There are no direct statistical data on the number of such partnerships; part of cohabitations is recorded by the census data. Between 1991-2001 the increase of cohabitations by 31,5% was recorded. The evidence on the growing number of cohabitations can be found, for example, in the increasing number of children born outside marriage, which increased, as compared to nineties, nearly two times.

## Education

The prolonging time of study is one of the reasons for the postponement of marriages towards older age. The educational attainment consequently influences the family and reproductive behaviour.

The structure of marriages by the education of betrothed couples records two long-term tendencies. The first one is the fact that most frequently partners at the same educational level contract marriage. The difference in the education of betrothed couples is not contributing directly to the change in the intensity of nuptiality; however, it can have an impact on the stability or equality of the wedlock. In 2002 almost 60% from the total of marriages were contracted by betrothed couples with the same education. 33,6% of contracted marriages were represented by couples with the secondary education and 10% with the education at the university level. In 1995, there were only 24,8% marriages, in case of which both of spouses graduated from secondary schools including the school-leaving exam and 5% graduated from universities. As compared to 1995, in 2002 the share of marriages contracted between spouses with the secondary education without school-leaving exam decreased by 10,7 percentage point down to 11%. The share of marriages in which the groom and bride completed the basic school decreased only slightly, from 5,9% in 1995 down to 5% in 2002.

**Tab. 1.4: Marriages by education of spouses in 2002**

		Bride's education									
		Number					in %				
		Total	Basic	Secondary without school-leaving exam	Secondary with school-leaving exam	University	Total	Basic	Secondary without school-leaving exam	Secondary with school-leaving exam	University
Groom's education	Total	25062	2137	4724	13934	4267	100,0	8,5	18,8	55,6	17,0
	Basic	1772	1211	292	239	30	7,1	4,8	1,2	1,0	0,1
	Secondary without school-leaving exam	7417	631	2949	3547	290	29,6	2,5	11,8	14,2	1,2
	Secondary with school-leaving exam	11523	273	1373	8423	1454	46,0	1,1	5,5	33,6	5,8
	University	4350	22	110	1725	2493	17,4	0,1	0,4	6,9	9,9

The second tendency in connection with education is represented by an increase of the share of spouses with higher education – secondary education, including the school-leaving exam and university education – in the total number of marriages. It is related to the entire growth of the educational level of population as well as to a more frequent postponement of marriages towards the period after graduation. In 2002, the majority of grooms (46%) and brides (55,6%) at the time of marriage graduated from secondary school, including the school-leaving exam and 17% of men, equally to women, graduated from universities.

## Order of marriage

The marriages of single spouses represent the highest number and, at the same time, also the highest share in the total number of marriages. In 2002 their number was higher than 20 000 (81,7%). Already several times mentioned

reduction in the intensity of nuptiality – especially the nuptiality of singles – caused by the postponement of marriage or its rejection, was evidently reflected also in the long-term decrease of the number of first marriages. In 1995 those marriages formed almost 85,5% of the total marriages, however, until 2002 their share decreased down to already mentioned 81,7% , what was a fall by nearly 13%.

With the increasing order of marriage the number of marriages is decreasing. From the demographic standpoint the remarriages contribute to the growing intensity of nuptiality. In 2002, there were more than 6 000 marriages in Slovakia, in which at least one of the spouses was not single and, at the same time, in 1950 cases the remarriage of both spouses was in question.

**Tab.1.5: Marriages by order in 2002**

Groom – marriage order	Bride – marriage order				Total
	1	2	3	4+	
1	20 474	1 185	45	4	21 708
2	1 686	1 321	102	7	3 116
3	32			3	208
4+	13	13	4		30
Total	22 238	2 627	183	14	25 062

## Nuptiality by regions

**Tab.1.6: Selected nuptiality indicators in 2001**

		Towns	Rural	Region							
				BL	TA	TC	NI	ZI	BC	PV	KI
Marriages		13 805	9 990	2 711	2 437	2 571	3 005	3 263	2 570	3 892	3 346
Share of marriages (SR = 100%)		58,0	42,0	11,4	10,2	10,8	12,6	13,7	10,8	16,4	14,1
Crude marriage rate		4,57	4,23	4,53	4,42	4,25	4,21	4,71	3,88	4,92	4,37
Total first marriage rate	Males	0,452	0,493	0,458	0,458	0,440	0,448	0,490	0,410	0,542	0,456
	Females	0,464	0,508	0,451	0,465	0,463	0,452	0,528	0,416	0,555	0,471
Mean age at marriage	Males	29,62	27,22	31,63	28,49	28,71	28,67	27,84	28,88	26,87	28,44
	Females	26,61	24,27	28,30	25,50	25,86	25,68	24,92	25,76	24,22	25,55
Mean age at 1. marriage	Males	27,03	26,15	28,09	26,71	26,81	26,67	26,31	26,66	25,87	26,57
	Females	24,68	23,43	25,81	24,00	24,35	24,00	23,95	23,93	23,49	24,06
Marriages of singles in %	Males	81,9	94,5	79,6	88,5	85,6	87,0	88,5	85,6	93,2	86,8
	Females	86,0	93,4	81,7	88,3	89,3	86,6	92,8	86,9	94,4	89,6

From the geographic point of view, there are some differences in the development of nuptiality. These are conditioned by the structure of population by age and marital status, religiosity and urbanisation. Thus, there is a difference in the intensity of nuptiality in urban and rural areas. Firstly, it is the difference in the number of marriages. More marriages are annually contracted in cities. Nearly 60% from the total of marriages in Slovakia in 2001 were contracted in cities.

On the contrary, the intensity of nuptiality in the mentioned time period was significantly higher in rural areas. It is the consequence of the age structure of population; in rural areas there is a lower number of populations at the age of highest nuptiality. There is also a higher share of first marriages in the country – in case of men (94,5%), and in case of women (93,4%). Another distinct feature is the fact that in cities there is a higher average age at marriage, as well as the average age at first marriage.

Regional differences in nuptiality in regions of Slovakia are remarkable. The tendency of the decrease in nuptiality appears in all regions of the SR. Lingeringly highest value of nuptiality is maintained in the regions of Prešov and Žilina, which are distinguished by a higher religiosity and a relatively lower urbanisation degree. On the contrary, the lowest value of nuptiality was in 2001 in the region of Banská Bystrica, followed by the regions of Nitra and Bratislava.

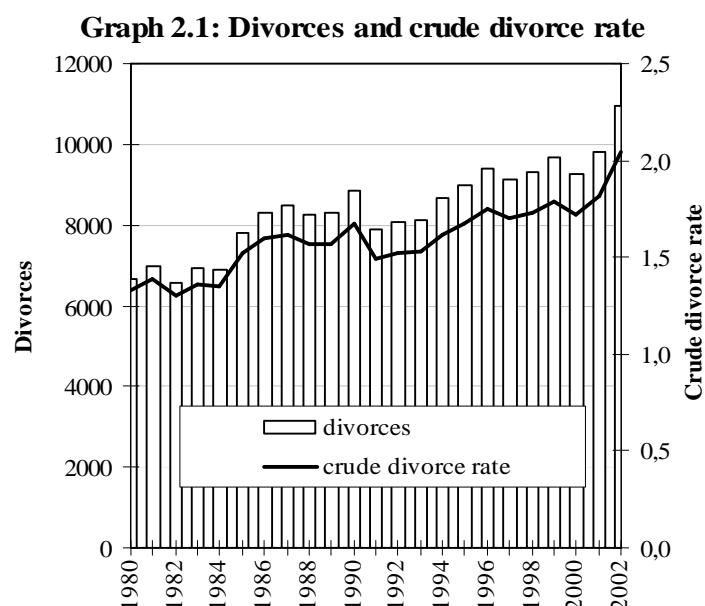
Among all regions the region of Bratislava has a specific position, where the betrothed couples are remarkably older. The mean age at marriage was here in 2001 higher than in other regions (by 2,7-4,8 years in case of men and by 2,4-4,1 years in case of women). It is partially a consequence of a relatively high share of divorced spouses. The highest number of single spouses was recorded in 2001 in the regions of Prešov and Žilina what was reflected also in the lowest mean age at first marriage of men and women. In these regions also the value of the total nuptiality of women and men is to be considered as the highest one.

## 2. Divorce

**Tab. 2.1: Basic characteristics of divorce**

		1985	1990	1995	1996	1997	1998	1999	2000	2001	2002
Divorce petition		12 420	12 881	11 765	12 222	11 838	12 116	12 457	12 027	12 443	13 752
Divorces		7 800	8 867	8 978	9 402	9 138	9 312	9 664	9 273	9 817	10 960
Realized divorce petition (%)		62,8	68,8	76,3	76,9	77,2	76,9	77,6	77,1	78,9	79,7
Crude divorce rate		1,51	1,67	1,67	1,75	1,70	1,73	1,79	1,72	1,82	2,04*
Number of divorces per new marriages		20,0	21,9	32,7	34,2	32,7	33,9	35,3	35,8	41,3	43,7
Total divorce rate		0,202	0,229	0,241	0,257	0,254	0,262	0,277	0,269	0,287	0,328
Mean age at divorce	Males	36,24	36,26	36,49	36,81	37,31	37,58	37,87	38,15	38,56	38,53
	Females	33,36	33,71	33,96	34,24	34,72	35,12	35,34	35,66	36,08	36,00
Mean duration of divorced wedlock		x	10,70	11,19	11,80	12,29	12,61	12,85	13,23	13,62	13,56
Divorces with underage children (%)		73,1	74,3	75,5	74,5	73,0	72,5	71,2	70,3	70,1	70,2

\* Preliminary data



Similarly as in other advanced countries, also in Slovakia we can register an increase in divorce from the half of the 20<sup>th</sup> century. A growing intensity of divorce from 1950 is a characteristic feature of the population development of the Slovak population which depends on many factors – social, economic and legislative. From the demographic standpoint the development of nuptiality has also a significant impact on the development of divorce. Divorce is strongly related to the execution of courts and short-term fluctuations in its development are often caused by legislative measures. The Act of Law on Family, valid from 1950, stated that divorce should be considered as the only possible way of the dissolution of marriage and, at the same time, it declared that a deep and permanent breakdown of marriage should be the only possible reason for divorce<sup>4</sup>. The adoption of this Act of Law facilitates the legislative process re-

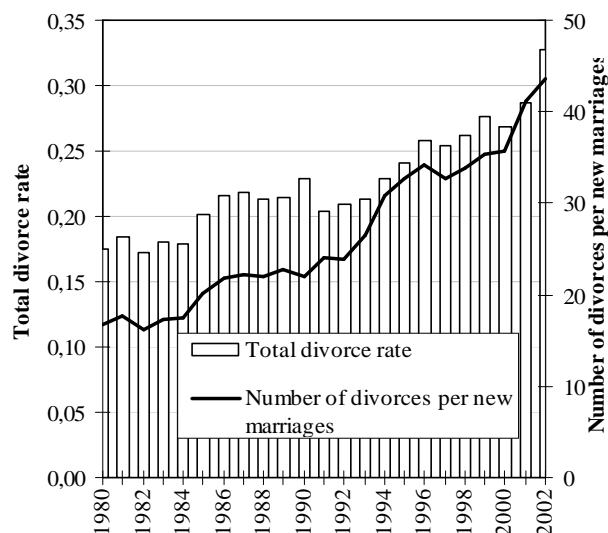
lated to the divorce proceeding what invoked an increase in the number of divorces. During sixties the number of divorces increased approximately from 2300 up to 3300 per year. With effect from 1 January 1964 a new Act of Family Law entered into force<sup>5</sup>. Also henceforward, divorce was the only possible way for the dissolution of marriage, but the subjective standpoint of „guilt“ was replaced by a principle of an objective standpoint – i.e. whether the functioning of marriage can be also further achieved. By the adoption of the next legislative measure in 1973, which cancelled the pre-trial on the conciliation of married couples, the proceeding on divorce was again facilitated what led to another increase in the number of divorces. Until the end of eighties the number of divorces climbed from approximately 6000 in the half of seventies up to 8000 per year. In the period of a so called real socialism, the post-war family model with a unique scheme of behaviour, at the beginning of which was the marriage and shortly after the marriage the reproduction and the upbringing of children took place, was fulfilled at the very young age. One of the main causes of the high divorce in those times was probably also the high nuptiality of people belonging to younger age categories – young people contracted marriage without any relevant life experience. At the same time,

<sup>4</sup> Until 1950 a Law from 1918 was valid, which allowed the dissolution of marriage by two ways – divorce „a mensa et thoro“ and divorce „a vinculo matrimonii“.

<sup>5</sup> Family Law from 1963 is still valid in our country. Its last amendment entered into force on April 2002.

marriages contracted under the pressure of an unplanned pregnancy were very often in question (the contraception at those times was far away from its level of nowadays). Divorce became gradually socially accepted and a legislatively available way for the solution of marital crises.

**Graph 2.2: Number of divorce per new marriages and total divorce rate**

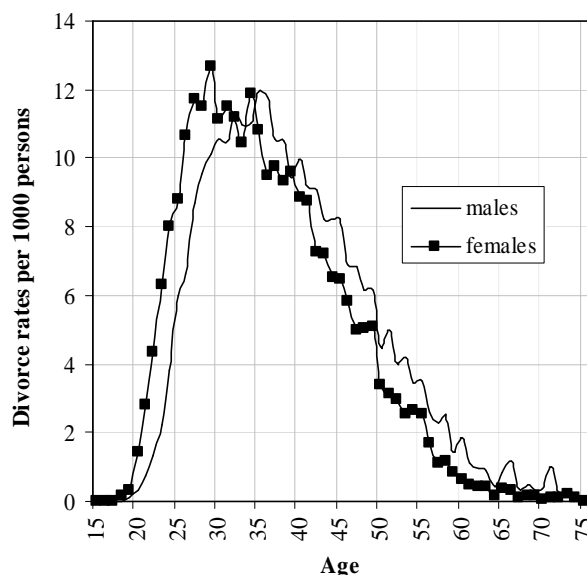


divorces per 1000 inhabitants. A relatively smooth and moderate increase in the crude divorce rate intensified in the half of eighties. This growing tendency was interrupted twice. Firstly, at the turning-point of 1990 and 1991, when the value of the crude divorce rate sharply fell from 1,67 down to 1,49. Second and a more moderate decrease of the crude divorce rate was recorded at the turning-point of millenniums (from 1,79 in 1999 down to 1,72 in 2000). Until now the highest value of the crude divorce rate was recorded in 2002, when 2,04 divorces fell per 1000 inhabitants.

Index of divorce<sup>6</sup> has a smoother development without any significant fluctuations. Already at the beginning of eighties the index of divorce was three times higher than in fifties. Approximately from 1985 the index of divorce started to increase more remarkably in connection with the increasing number of divorces and the decreasing number of marriages. Until nineties the index of divorce had increased up to 35,3% and in 2002 it achieved 43,7%, what meant that 43 divorces fell per 100 marriages contracted in 2002.

These indicators (crude divorce rate, index of divorce) have only an informative meaning. The level of divorce is not dependent on the number of population or the number of marriages in the year under observation but depends mainly on the number of marriages in the previous years and on the distribution of divorces by the duration of marriage. Thus, a more precise and objective indicator of the development of divorce is total divorce rate, which expresses the average number of divorces falling per one marriage. From the beginning of eighties until nowadays the value of total divorce rate became nearly two-fold, when from 0,176 in 1980 it increased to the until now highest value being 0,328 in 2002. It means that in Slovakia each third marriage is currently divorced at the average. The significant increase in divorce during last two years is also noticeable. As compared to 2000, the current value of total divorce rate is higher by 22%.

**Graph 2.3: Divorces by age in 2002**



<sup>6</sup> Number of divorces per 100 marriages contracted in the same time period.



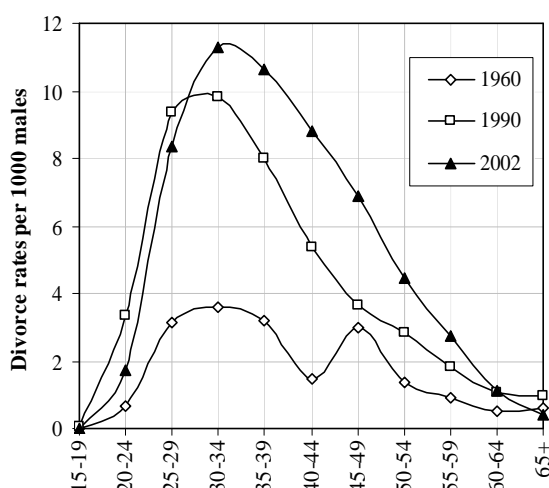
## Age and gender

Tab. 2. 2: Divorce rates by age (per 1000 males or females)

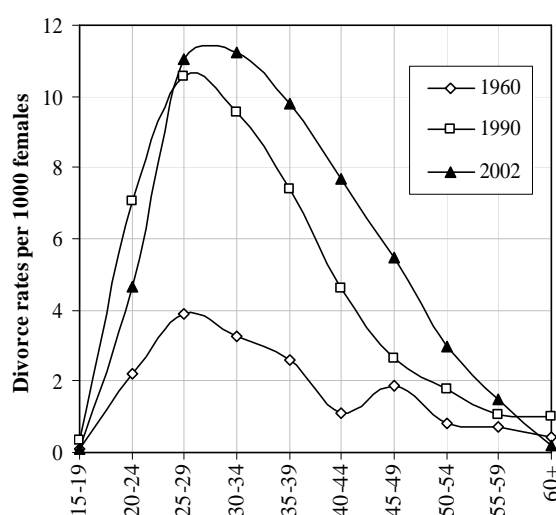
	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002*
Males										
15-19	0,03	0,07	0,05	0,03	0,02	0,02	0,03	0,01	0,02	0,02
20-24	2,89	3,89	3,46	3,23	2,81	2,42	2,42	1,92	1,64	1,70
25-29	8,03	8,82	9,30	9,66	8,74	8,32	8,35	7,45	7,71	8,36
30-34	8,71	9,20	9,19	9,71	9,42	9,56	9,69	9,99	10,24	11,27
35-39	7,22	7,97	8,12	8,03	8,27	8,64	8,59	8,44	8,95	10,62
40-44	6,07	6,77	6,75	7,34	6,71	7,46	7,57	7,19	7,94	8,81
45-49	4,40	4,72	5,05	5,17	5,36	5,35	5,96	5,64	6,28	6,89
50-54	3,12	3,22	2,76	3,45	3,18	3,61	3,95	3,82	4,28	4,46
55-59	1,92	1,87	1,56	1,73	2,10	1,99	2,36	1,89	2,34	2,71
60-64	1,23	1,16	0,84	0,93	1,09	0,89	1,02	1,16	1,12	1,11
65-69	0,88	0,82	0,59	0,60	1,09	0,99	0,52	0,74	0,73	0,66
Total divorce rate of wedlock	0,211	0,232	0,226	0,236	0,229	0,232	0,239	0,228	0,243	0,280
Females										
15-19	0,40	0,34	0,28	0,27	0,18	0,20	0,18	0,12	0,12	0,10
20-24	6,23	7,87	7,05	6,77	5,66	5,14	5,41	4,50	4,15	4,63
25-29	9,58	9,95	10,35	10,87	10,41	9,87	10,08	9,73	9,81	11,04
30-34	7,90	8,96	8,90	9,16	9,39	9,79	9,80	9,34	10,25	11,23
35-39	6,20	7,21	7,41	7,81	7,46	8,19	7,89	7,61	8,66	9,77
40-44	5,00	5,63	5,79	6,17	6,03	6,13	6,84	6,39	6,91	7,69
45-49	3,14	3,18	3,50	3,86	4,07	4,23	4,53	4,77	4,87	5,48
50-54	1,72	1,97	1,71	1,82	2,00	2,37	2,57	2,48	3,01	2,96
55-59	1,01	1,05	0,77	0,94	0,97	0,93	1,14	1,05	1,21	1,50
60-64	0,56	0,69	0,36	0,47	0,44	0,44	0,43	0,51	0,53	0,43
65-69	0,37	0,26	0,21	0,21	0,31	0,29	0,17	0,22	0,23	0,23
Total divorce rate of wedlock	0,207	0,230	0,224	0,233	0,226	0,229	0,236	0,226	0,240	0,274

\* Preliminary data

Graph 2. 4: Divorces by age groups, males



Graf 2. 5: Divorces by age groups, females



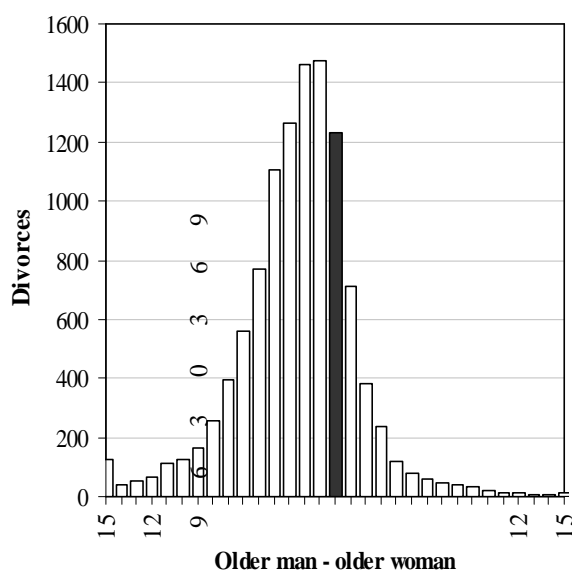
The values of the mean age at divorce for men and women did not significantly change in eighties; it can be said that more or less they were maintained at the same levels (35,9 -36,5 years for men and 33,0-33,8 for women). A more noticeable increase in the mean age at divorce had been recorded only from the beginning of nineties. From 36,3 years in case of men and 33,7 years in case of women, until 2002 the mean age at divorce increased by 2,2 years (evenly for both genders) up to 38,5 and 35,9 years respectively. The increase of mean age is related mainly to the

decreasing intensity of nuptiality at younger age categories. The gradually prolonging marriage duration at divorce has also a partial impact on the increasing of the mean age.

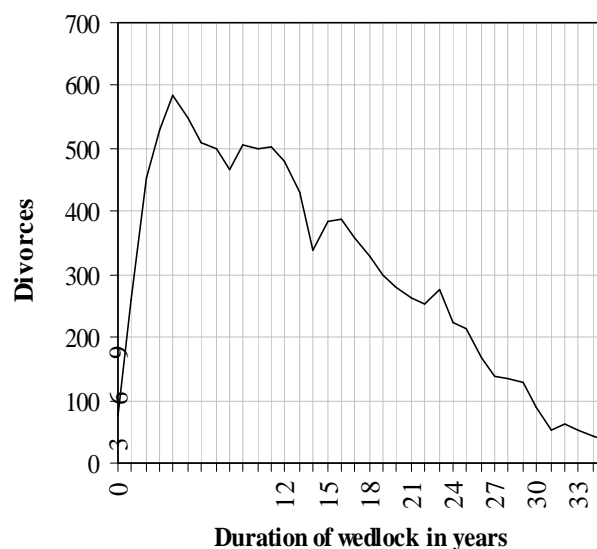
Distribution of divorce rates by age and gender changed at the turning-point of millennium. The maximum divorce rate, which was in nineties the highest in the group of men aged 30-34 shifted at the end of nineties towards the older age group of 35-39. As for women, the maximum divorce rate has remained in the group of women aged 25-29 during nineties until nowadays. Despite a long-term increase in divorce rates in the older age groups of men and women from the beginning of nineties, the continuous decrease of these rates in younger age groups of 15-19 and 20-24 can be judged positively.

Distribution of divorces by the difference in age of husbands has a similar shape as the distribution by age at marriage. The difference in age of husbands at divorce was in 2002 2,5 years at the mean and it has been kept at this level from 1995. From the total number of divorces, 72,6% were such divorces in which the man was older than the woman. In 16,1% cases the woman was older than the man. The age difference does not have any direct impact on the possibility to divorce, although according to the sociologic research the probability of divorce in case of marriages contracted at the „immature“ age is the highest one.

**Graph 2.6: Difference in age at divorce in 2002**



**Graph 2.7: Divorces by duration of wedlock in 2002**



## Duration of wedlock

**Tab. 2.3: Divorces by the marriage duration**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002
Up to 1 year	118	109	63	81	75	86	88	50	60	74
1-3	1 531	1 646	1 415	1 348	1 205	1 134	1 185	1 132	1 050	1 241
4-6	1 564	1 662	1 739	1 870	1 642	1 574	1 570	1 412	1 437	1 644
7-9	1 309	1 253	1 339	1 422	1 432	1 474	1 471	1 418	1 410	1 474
10-14	1 394	1 751	1 642	1 742	1 769	1 839	1 940	1 804	2 078	2 253
15-19	829	1 215	1 390	1 394	1 336	1 397	1 390	1 387	1 506	1 758
20-24	533	637	855	915	973	1 038	1 135	1 088	1 190	1 297
25+	522	594	535	630	706	770	885	982	1 086	1 219
Total	7 800	8 867	8 978	9 402	9 138	9 312	9 664	9 273	9 817	10 960

The mean duration of the divorced marriage has a slightly increasing tendency. Since 1990, i.e. during ten years, it had been increasing by 2 years and in 2002 the mean duration of the divorced marriage was historically the longest – 13,62 years. The share of marriages, which were divorced immediately during the first year had fallen since 1990 from 1,5% down to 0,7% in 2002 and the share of marriages divorced until three years fell from 19,6% to 11,3%. It can be assumed, that this is mainly the consequence of the fall of irrationally contracted marriages (usually

at very young age, often under the pressure of pregnancy of woman). Since nineties the majority of marriages had been divorced after 5-7 years. Only in 1995 and 1996 this number was exceeded by marriages with the shorter duration, i.e. 4-6 years. More than one third of marriages were divorced until ten years.

It seems that for young married couples, i.e. for those, whose marriage duration is shorter than 10 years, the most critical period is from the third up to the fifth year after marriage, when the majority of such marriages is getting divorced. In 2002, there were 15% of such cases from the total number of divorces (18,7% in 1990).

## Number of underage children

**Tab. 2.4: Divorces by the number of underage children**

Number of underage children	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002
0	2 096	2 282	2 204	2 400	2 468	2 557	2 828	2 759	2 937	3 269
1	2 726	3 217	3 570	3 766	3 611	3 730	3 855	3 771	3 965	4 464
2	2 254	2 603	2 604	2 618	2 498	2 454	2 415	2 235	2 375	2 618
3+	724	765	600	618	561	571	566	508	540	609
Total	7 800	8 867	8 978	9 402	9 138	9 312	9 664	9 273	9 817	10 960
in %	73,1	74,3	75,5	74,5	73,0	72,5	70,7	70,2	70,1	70,2
Mean number										
– all divorces	x	x	1,19	1,17	1,14	1,13	1,09	1,07	1,07	1,07
Mean number										
- divorces with underage children	x	x	1,58	1,57	1,57	1,57	1,55	1,52	1,52	1,52

The distortion of relations and stability in family, which results in divorce, has an all-society impact, however, more serious is its negative impact on children coming from the divorced marriage. Undoubtedly this experience is for them the most traumatic one. The fact that the average number of underage children living in families getting divorced is lingeringly increasing is an equally sorrowful story. While at the beginning of sixties the divorced marriages with underage children formed approximately 60% from the total number of divorces, in eighties and nineties their number exceeded 70%. At the turning-point of centuries the number of divorces with underage children slightly decreased and in 2002 it reached the level of approximately the beginning of eighties, i.e. 70,2%.

In 2002, nearly three quarters of divorce suits were the cases with underage children. As compared to 1995, their number increased by 8,4% and in comparison with 2001 by 7,4%. Marriages with one child are those which are most frequently divorced - in 2002 there were nearly 4,5 thousand of such cases. The second position belongs to marriages with two children. Generally speaking, the number of divorces is decreasing each year in connection to the increasing number of underage children in family. Despite that, in the previous year more than 16 000 children lost the possibility for a coexistence with both parents, of which nearly 12 000 were underage children. According to the sociologic findings, the probability that the marriage will be divorced in case of men or women who personally come from the divorced family is relatively high. The absence of one parent in family makes worse, inter alia, also its financial situation, which the family has to cope with, what consequently makes worse its position in society. The average number of underage children in families getting divorced has been the same since 2000, i.e. 1,07.

Relatively large part of divorces is formed by marriages without children. Since 1985 their number had exceeded the value of 2000 cases annually. Their number significantly increased at the end of nineties and in 2002 it reached the record level of 3,2 thousand what, if taken relatively, represented almost 30% of total divorces. In comparison with 1995, the number of divorces without children increased by 1000 cases (growth by 9,7%).

## Divorces by causes

From the standpoint of divorces by causes, two rounds of problems can be differentiated. In question are: 1/ causes resulting from bad material conditions, financial disagreements and problems related to housing and 2/ causes related to the worsening of inter-human relations (marriage intolerance, extramarital relations, moral fall, etc.).

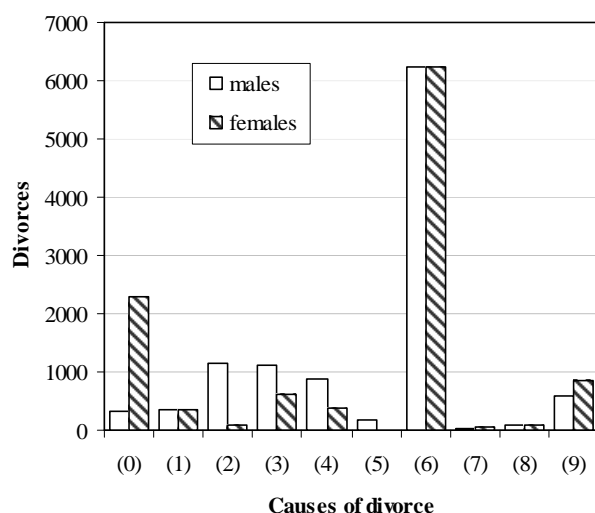
Prior to the remarkable increase of the divorce intensity, i.e. approximately until the beginning of seventies, the most frequent causes for divorce were alcoholism on the part of men and infidelity on the part of woman. As time passed on, the personality differences settled as the main cause for the breakdown of marriage at both genders. It is however a relatively general and broad definition of a cause for divorce, thus, we can assume that this category often involves also many of other concrete causes. While at the beginning of nineties the number of divorces caused by the personality differences moved around 2,6-2,7 thousand cases, in the half of nineties it exceeded the level of 4 thousand. From 1995 until 2002 the number of such cases increased by 34% up to 6235 cases, which formed more than half of all divorces.

**Tab. 2.5: Divorces by causes**

Causes of divorce	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002
<b>Males</b>										
Infidelity	1 682	1 377	1 101	1 044	971	987	1 052	946	998	1 125
Personality differences	1 454	2 767	4 109	4 616	4 640	4 962	4 947	4 883	5 586	6 235
Alcoholism	2 080	1 599	1 240	1 200	1 109	1 069	1 159	1 100	1 043	1 159
Lack of interest in the family	462	995	984	947	858	847	1 006	893	865	884
Court did not find the fault	1 254	525	350	336	311	286	309	323	286	318
Other causes elsewhere not included	868	1 604	1 194	1 259	1 249	1 161	1 191	1 128	1 039	1 239
Total	7 800	8 867	8 978	9 402	9 138	9 312	9 664	9 273	9 817	10 960
<b>Females</b>										
Infidelity	1 460	1 155	807	740	662	661	591	625	531	604
Personality differences	1 454	2 767	4 127	4 616	4 640	4 962	4 947	4 883	5 586	6 235
Alcoholism	400	477	488	428	385	358	424	433	369	369
Lack of interest in the family	3 936	2 515	2 144	2 142	2 030	2 025	2 359	2 095	2 096	2 294
Court did not find the fault	550	1 953	1 412	1 476	1 421	1 306	1 343	1 237	1 235	1 458
Other causes elsewhere not included	7 800	8 867	8 978	9 402	9 138	9 312	9 664	9 273	9 817	10 960

**Tab. 2.6: Divorces by causes in 2002**

		Causes for divorce on the part of women												
		(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	Total	%	
Causes for divorce on the part of men	Court did not find the fault	(0)	0	0	19	216	56	0	0	9	0	18	318	2,9
	Over-hasty marriage	(1)	0	367	0	0	0	0	0	0	0	0	367	3,3
	Alcoholism	(2)	808	0	31	80	47	3	0	3	0	187	1 159	10,6
	Infidelity	(3)	743	0	11	142	28	4	0	8	0	189	1 125	10,3
	Lack of interest in the family	(4)	521	0	4	57	195	2	0	1	0	104	884	8,1
	Ill-treatment	(5)	109	0	4	15	8	4	0	2	0	28	170	1,6
	Personality differences	(6)	0	0	0	0	0	0	6 235	0	0	0	6 235	56,9
	Health reasons	(7)	13	0	1	1	2	0	0	16	0	7	40	0,4
	Sexual incompatibility	(8)	0	0	0	0	0	0	0	0	81	0	81	0,7
	Other causes	(9)	100	0	16	93	33	1	0	12	0	326	581	5,3
Total		2 294	367	86	604	369	14	6 235	51	81	859	10 960	100,0	
%		20,9	3,3	0,8	5,5	3,4	0,1	56,9	0,5	0,7	7,8	100,0		

**Graph 2.8 Divorces by causes in 2002**

In 2002 the further frequent causes for divorce on the part of men were the following: alcoholism (10,6%), infidelity (10,3%) and lack of interest in family (8,1%). On the woman's part it was mainly infidelity (5,5%), followed by lack of interest in family (3,4%). All other causes represented on the man's part 11,3% and on the woman's part 13,3% from the total number of divorces. From the long-term standpoint, the high share of divorces in which the court did not find the guilt on the woman's part, is very interesting. Despite the fact that in nineties the number of such cases decreased approximately by 1000 as compared to eighties, except for 1992 and 1993 their number was higher than 2000 annually. In 2002 the court did not find the guilt on the woman's part in 2294 cases (21%).

## Results of divorce petitions

From the total number of divorce proposals more than three quarters end by a divorce, the remaining part is represented mainly by abandoned proposals and rejected proposals. The number of proposals is growing similarly as the

number of positively arranged proposals. Since nineties their number had been moving above the level of 12 000 per year, except for 1995 and 1997, when the number of divorce proposals fell closely below this level.

In 2002 the number of divorce proposals reached a record value 13,7 thousand, of which 10,9 thousand were accepted (670 against the petition of man, 373 against the petition of woman, 8783 under the mutual agreement and in 134 cases one of the husbands was abroad). From the total number of undivorced marriages, 116 proposals were rejected, 1842 were abandoned and the petition was abolished in 78 cases. In 756 cases the court decided alternatively.

The duration of the divorce petition in 2002 was 7,3 months at the average, regardless its result. The most frequent reason for the rejection of the divorce proposal was in 2002 the reckless relation to marriage (31,8%), a short-term non-committal violation (24%) and the interest of underage persons (11,2%). Other reasons for rejection represented 30%.

The share of divorce proposals made by women represents lingeringly approximately double of divorce proposals made by men. In 9182 cases in 2002 the proposal was made by woman. Among factors, which substantially influence the increasing divorce activity of women, belongs the growth of economic independence, rise of social separateness from men, advantaging of women in some social and legislative consequences of divorce (children, dwelling ...). In addition to them, there is a whole series of other factors (the sexual life is not a taboo anymore, a feeling of a post-divorce safety thanks to parents etc...). However, one has to take into account that these factors act in a complex way and in relation to the real social situation.

## Divorce by regions

**Tab. 2.7: Selected indicators of divorce by regions of the SR in 2001**

	Towns	Rural	Region							
			BL	TA	TC	NI	ZI	BC	PV	KI
Divorce petitions	9 090	3 353	1 798	1 227	1 430	1 807	1 272	1 951	1 157	1 801
Divorces	7 172	2 645	1 435	993	1 160	1 418	1 065	1 508	889	1 349
Realized divorce petitions (%)	73,1	26,9	14,6	10,1	11,8	14,4	10,8	15,4	9,1	13,7
Crude divorce rate	2,38	1,12	2,39	1,80	1,91	1,99	1,54	2,28	1,12	1,76
Number of divorces per new marriages	52,0	26,5	52,9	40,7	45,1	47,2	32,6	58,7	22,8	40,3
Mean age at divorce - males	38,79	37,91	40,06	38,00	38,61	37,84	38,37	38,43	38,52	38,39
Mean age at divorce - females	36,46	35,04	37,52	35,70	36,20	35,21	35,91	35,92	36,08	35,91
Mean duration of divorced wedlock	13,26	12,76	13,56	12,97	13,34	12,53	13,12	13,25	13,25	12,99
Divorces with underage children (%)	70,0	70,2	66,1	72,0	72,0	70,0	72,8	71,6	69,2	68,1
Mean number of underage children	1,48	1,55	1,43	1,55	1,59	1,53	1,65	1,62	1,62	1,58

From the spatial layout standpoint the divorce in Slovakia is remarkably differentiated. This differentiation is, in addition to several factors, to a great extent influenced by a different religiosity in the territory of Slovakia, as well as by a different degree of urbanisation.

The divorce indicators in rural areas are, as compared to the urban areas, lower. The social climate in the country is marked by a strong influence of traditions, religion and, inter alia, a certain social control takes place here what creates natural barriers against divorce. It can be evidenced by a lower number of divorces (24% from the total number in 2002), as well as by lower indicators of divorce. On the contrary, in cities, where the anonymity is greater and the subsistence conditions are easier (working conditions, services, transportation...), the number of divorces is more than 2,5 times higher as compared to the country. In 2002 the crude divorce rate in cities reached the value of 2,38 and even 52 divorces fell per 100 marriages. The mean age at divorce for men and for women was in comparison with the country higher by approximately one year. The average duration of the divorced marriage is longer in comparison with the country.

The differences in the distinguished divorce intensity are obvious not only between the rural and urban settlements but also when comparing the particular regions. Regions of the West and South Slovakia are developing from the demographic standpoint less dynamically as compared to the East a North part of Slovakia. The highest divorce is in the region of Bratislava, followed by the regions of Banská Bystrica and Nitra. On the contrary, the lowest indicators of the divorce intensity are in the regions of Prešov and Žilina. Other regions are situated roughly at the level of the nation-wide average. The high divorce in the region of Bratislava is to a great extent caused by the divorce in the capital – Bratislava, where the highest number of population at the reproductive age is concentrated, and so, at the age of the highest divorce. In this region also the highest average age at divorce (40,06 for men and 37,52 for women) together with the highest average duration of marriage at divorce (13,6 years) can be found. On the other

hand, in the region of Bratislava, both the lowest share of divorced marriages with underage children (66,1%) and the average number of underage persons in divorced marriages (1,43) take place.

### 3. Natality

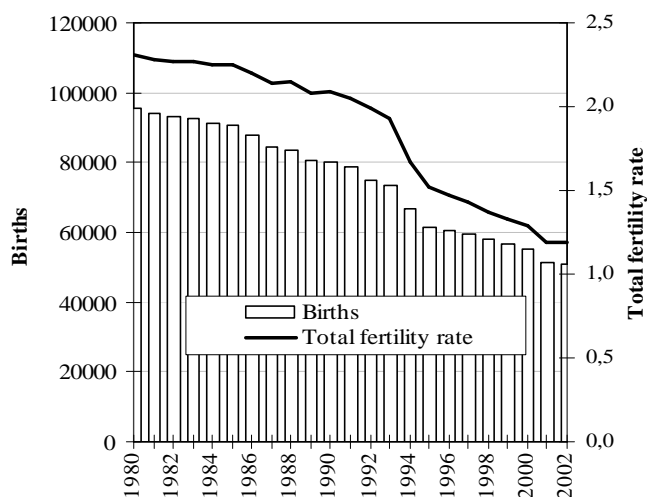
**Tab. 3.1: Basic characteristics of natality and fertility**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002
Births	90 645	80 390	61 668	60 363	59 356	57 863	56 482	55 366	51 343	51 035
Live-births	90 155	79 989	61 427	60 123	59 111	57 582	56 223	55 151	51 136	50 841
Stillbirths	490	401	241	240	245	281	259	215	207	194
Live-births out of wedlock	5 922	6 085	7 747	8 430	8 923	8 827	9 480	10 069	10 105	10 984
Live-births out of wedlock (%)	6,6	7,6	12,6	14,0	15,1	15,3	16,9	18,2	19,7	21,6
Crude birth rate	17,47	15,10	11,45	11,19	10,98	10,68	10,42	10,21	9,51	9,45*
General fertility rate	71,5	60,2	43,6	42,3	41,3	40,0	38,9	38,0	35,4	35,3*
Total fertility rate	2,254	2,085	1,523	1,470	1,427	1,374	1,329	1,292	1,198	1,187*
Mean age at childbirth	25,21	25,25	25,36	25,50	25,67	25,82	25,99	26,21	26,46	26,67
Mean age at first childbirth	22,71	22,67	22,71	22,87	23,08	23,30	23,56	23,93	24,14	24,53
Gross reproduction rate	1,093	1,011	0,738	0,713	0,692	0,666	0,645	0,627	0,581	0,576*
Net reproduction rate	1,075	0,993	0,730	0,700	0,685	0,661	0,641	0,625	0,572	0,571*

\* Preliminary data

The current development of natality and fertility in the SR is characterised by a continuous decrease of the number of live-births, permanently low values of the total fertility rate as well as by the complex start-up of the new reproductive model of young generation. The decrease in natality and fertility was the most intensive mainly during 1993-1995, when the decrease of live-births was recorded almost by 12 000; the total fertility rate fell by 21,2% down to the value of 1,52 while, for example, during the whole eighties the fall of total fertility rate represented only 10%. In 1996 the decrease of natality and fertility slowed down, the year-on-year shortages in the number of live-births stabilised around 1000 annually. The exception was the year 2001, when the natality decrease was more intensive.

**Graph 3.1: Births and total fertility rate**



The year 2001 was noticeable due to several reasons. For the first time in the history of Slovakia a natural decrease of population occurred, when the number of live-births was lower by 844 than the number of deaths. In 2001, also the total fertility rate decreased for the first time below the level of 1,2 children per one woman and thus Slovakia ranked among countries with the lowest fertility level in Europe. A decreasing tendency continued also in 2002, when the number of live-births decreased again by 295, as compared to 2001, and the total fertility rate was maintained at the level of 1,19 children per one woman. Numbers of live-births reached very low values despite the fact that powerful population age groups born in seventies are still at the age of the highest fertility. These continuously decreasing trends indicate the shift to a new model of reproductive behaviour, which is visible mainly from the lower level of fertility, the

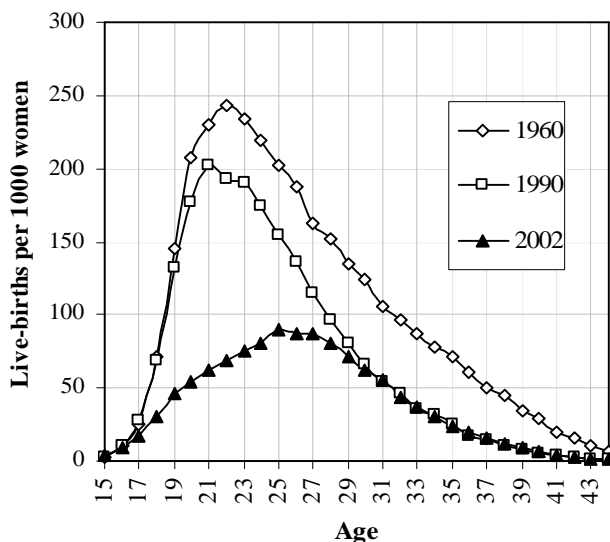
postponement of births towards older age categories, the growth of the average age of mothers and from the increasing share of children born out of wedlock. After 1989 in Slovakia, a change in the reproductive behaviour of mainly young generation, which sensitively reacts to the changed socio-economic situation, can be observed. During the transformation period the differences in income and social situation among the population increased. People started to be afraid of unemployment; a possibility to obtain an appropriate dwelling was reduced. On the other hand, there are more possibilities for the self-realization, which opened entirely new perspectives. These tendencies often influenced such important decisions as the contracting of marriage, family establishment and the number of children. Also other natality and fertility indicators show a decline. The net reproduction rate has been below the replacement level already since 1989. The natality level since this year has been ensuring neither the extended reproduction nor the single reproduction of population. In 2002 the net reproduction rate fell down to 0,57. It means that during one



generation, provided that both the current natality and mortality levels of women would be maintained, 43% of potential mothers would disappear by a natural change.

### Age of mother

**Graph 3.2: Fertility of women by age**



feasible fertility in the group of women aged 25 - 29 ranked for the first time on the first position; according to the fertility level it overran the lingeringly most fertile group of women aged 20-24 and it maintained this dominant position also in 2002.

Natality processes are to a great extent determined by the age of population because the chance to be pregnant is decreasing as the age is increasing. Until 1990 we can observe a narrow peak of the maximal natality for women aged 20-22. Currently the peak of maximal natality of women has shifted to the age of 25 and the curve has now a different course and shape. We cannot see any significant maximum, as it was in the past, and at the age of 35 a slightly increasing tendency of the natality level of women can be observed now.

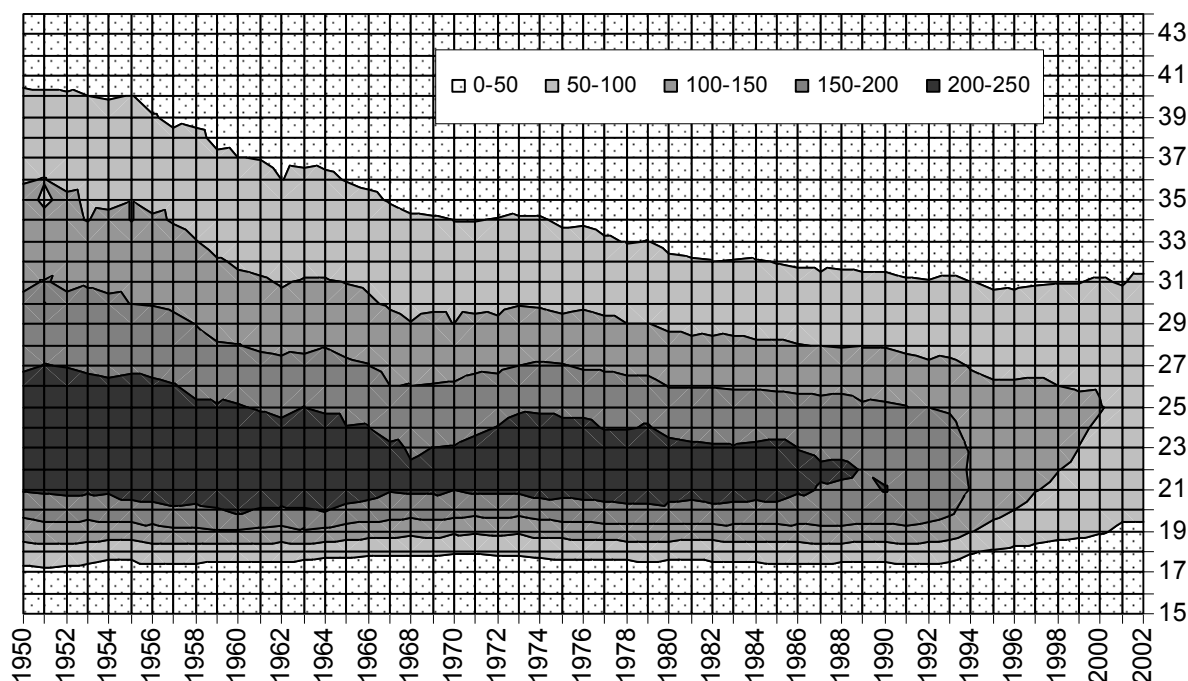
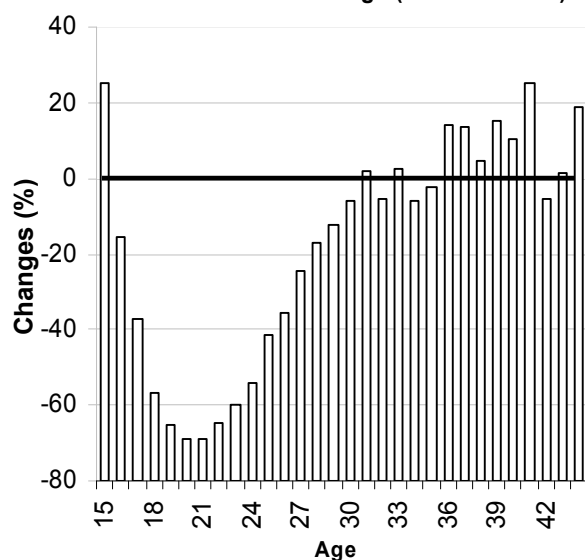
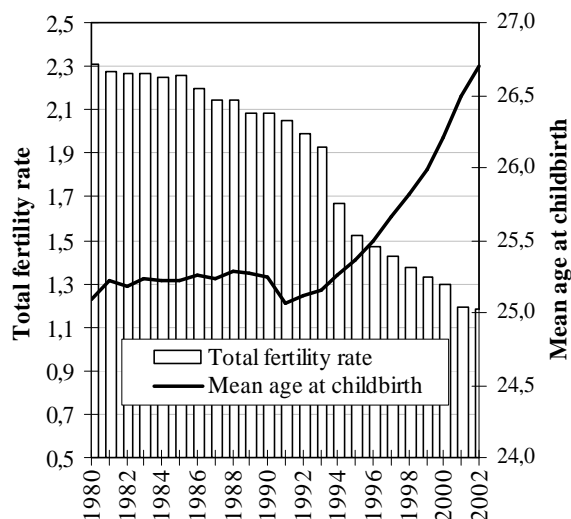
In nineties, the fertility of women decreased in all age groups, however, most remarkably in the lower age groups what witnesses the reinforcement of the new model of reproductive behaviour. Both, the family establishment and the first child-birth move towards the older age. This model reinforces also thanks to a more available and qualitative contraception, which allows the young couples to plan when and how many children they want to have. Lingeringly we observed the highest fertility in the age group of 20-24, nevertheless in 2001 a change occurred, while the

**Tab. 3.2: Fertility rates by age (per 1000 women)**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002*
15	3,54	2,86	3,56	3,47	3,64	3,86	4,00	3,42	3,30	3,58
16	14,26	10,42	9,52	9,67	10,99	9,66	10,35	9,40	9,04	8,78
17	34,72	27,36	20,49	20,82	20,15	20,58	20,25	18,78	19,31	17,24
18	70,86	69,21	44,89	40,95	37,80	35,87	33,84	33,42	28,92	29,84
19	132,13	132,13	83,25	75,32	66,83	60,23	56,81	53,14	44,16	45,68
20	187,90	177,06	112,95	99,61	89,44	80,36	71,55	68,64	56,08	54,75
21	217,10	201,65	128,42	115,87	101,78	92,97	85,94	76,14	66,52	62,61
22	214,70	193,49	130,27	121,55	113,19	100,86	93,67	86,72	74,15	68,32
23	208,95	189,77	128,12	121,01	116,26	110,03	99,60	91,38	82,44	75,65
24	188,57	174,55	123,17	117,89	118,07	112,08	102,17	97,69	86,22	80,57
25	168,26	154,07	114,48	113,01	108,54	109,42	105,30	100,92	93,13	90,37
26	144,34	136,08	103,79	103,29	106,02	100,09	97,91	98,87	91,53	87,83
27	121,90	115,04	89,57	92,48	91,65	89,32	88,81	89,86	86,42	86,84
28	104,11	96,83	80,53	79,09	79,24	77,29	83,75	79,47	78,22	80,03
29	85,61	80,61	65,22	67,69	66,20	71,72	69,82	69,18	69,66	70,76
30	73,47	66,66	56,77	55,22	58,08	58,16	60,27	61,07	60,38	62,71
31	59,53	54,22	45,78	47,34	48,39	49,81	49,21	52,48	48,32	55,21
32	49,48	45,61	37,83	39,61	39,69	39,25	43,61	42,73	43,85	43,12
33	40,42	36,00	32,39	31,76	33,16	34,39	32,68	34,68	35,08	36,84
34	33,17	31,71	27,19	26,43	27,41	28,78	28,29	29,26	28,50	29,78
35	27,57	24,74	21,65	23,83	23,25	21,64	23,32	24,23	24,37	24,21
36	21,09	17,53	16,25	17,40	18,87	19,10	19,01	18,91	18,55	20,00
37	16,62	14,21	13,54	14,38	14,80	14,81	14,20	15,61	14,21	16,13
38	12,45	11,02	11,11	10,60	11,38	10,83	11,80	11,65	11,44	11,50
39	8,53	8,30	7,23	8,27	8,00	7,94	8,22	8,99	8,49	9,54
40	6,29	5,81	5,32	5,65	6,16	6,00	5,48	6,50	6,51	6,40
41	3,24	3,34	3,94	2,80	3,35	3,43	4,09	3,71	4,04	4,18
42	2,43	2,64	2,35	2,23	2,45	2,75	2,54	2,76	2,36	2,49
43	1,39	1,03	1,74	1,38	1,05	1,41	1,43	1,53	1,39	1,04
44	0,59	0,70	0,71	0,69	0,64	0,52	0,54	0,60	0,83	0,83
TFR	2,254	2,085	1,523	1,470	1,427	1,374	1,329	1,292	1,190	1,187

\* Preliminary data



**Graph 3.3: Fertility by age (per 1000 women)****Graph 3.4: Changes in the fertility level of women in relation to age (1990 vs. 2002)****Graph 3.5: Fertility and mean age at childbirth**

Currently the highest fertility is concentrated into two age groups: women aged 20-24 and women aged 25-29, in case of which even 67 % of fertility is being feasible. A shift of fertility towards the older age is documented also by the development in the age group of women aged 15-19, who since the half of nineties by their level of fertility reached the fourth position after the age group of women aged 30-34. The share of children born by women aged until 24 is decreasing and the share of children falling on women older than 25 is increasing. The moderately growing tendencies were recorded in case of fertility of women above 35 years. This is caused mainly by already mentioned shift and delay in child-births towards the older age. The decline of the fertility level of women is diminishing in relation to the increasing age. These trends of the postponement of child-births have gradually been reflected in the increase of the mean age of mothers at birth, which at the beginning of nineties was 24,7 years and until 2002 it increased up to the level of 26,7 years. The mean age of mothers at first child-birth is increasing too, from 22,2 years in 1990 up to the level of 24,5 years in 2002.

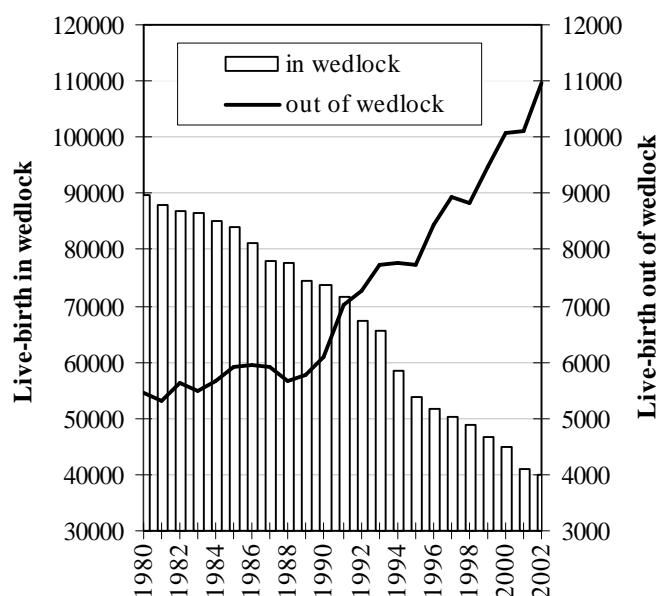
## Marital status

**Tab. 3.3: Fertility rates by sex, age and marital status**

	1985	1990	1995	1996	1997	1998	1999	2000	2001
Married women									
15-19	581,2	513,9	546,5	572,9	553,4	575,5	579,1	582,2	462,7
20-24	337,1	315,7	248,1	245,5	248,1	248,6	245,9	247,4	218,2
25-29	149,8	141,1	112,8	115,3	116,5	119,3	121,4	123,6	121,7
30-34	57,8	53,2	44,8	44,9	46,4	48,1	49,3	51,0	51,0
35-39	18,8	16,7	15,0	15,8	16,3	16,2	16,2	17,1	16,9
40-44	3,1	3,0	2,9	2,7	2,9	3,0	3,0	3,1	3,2
45-49	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1
Unmarried women									
15-19	12,7	11,2	12,1	12,3	13,2	13,0	13,6	13,9	13,8
20-24	23,5	22,8	22,0	22,5	22,0	20,7	20,8	21,1	21,8
25-29	23,4	24,9	27,0	27,9	27,0	24,1	25,6	25,3	27,6
30-34	16,9	18,1	20,1	22,0	22,6	21,4	21,4	23,0	24,7
35-39	10,0	8,7	9,5	11,6	11,5	10,1	12,0	11,8	12,0
40-44	1,6	2,1	2,5	2,3	2,3	2,3	2,1	2,7	2,4
45-49	0,1	0,1	0,1	0,1	0,1	0,1	0,0	0,0	0,1
Married men									
15-19	724,4	606,6	578,3	628,1	601,5	618,8	613,4	677,5	474,0
20-24	429,3	398,4	304,7	302,7	301,8	298,6	298,3	314,6	271,1
25-29	224,3	216,4	166,6	164,6	164	166,8	164,3	168,6	161,2
30-34	91,4	85,9	73,4	75,0	77,0	78,5	79,2	82,3	83,2
35-39	36,2	31,3	28,0	29,2	30	30,7	31,6	33,1	33,6
40-44	12,5	10,5	9,3	8,7	9,8	9,7	10,1	10,5	10,7
45-49	4,2	2,8	2,2	2,6	2,4	2,4	2,4	2,5	2,5

Both, the fertility and natality levels are influenced also by the marital status of population. Despite the general decrease in fertility, the extramarital fertility records a different tendency and is still growing. To the start-up of a new reproductive model also the weakening of the traditional marriage is related and thus also the increasing share of children born out of wedlock. The disposal of live-born children in wedlock is still ongoing, in 1990, 73 904 children were born in wedlock, until 2002 this number has fallen to 39 857 live-born children. Despite that, the marital fertility remains the decisive component of the total feasible fertility (78 % in 2002).

**Graph 3.6: Live-births by legitimacy**



in case of women aged 20 – 24, however, a decrease is visible also in case of women aged 15 – 19 and 25 – 29. In other age groups only minimal changes are in question, so we can speak about stagnation. In 2002, an interesting

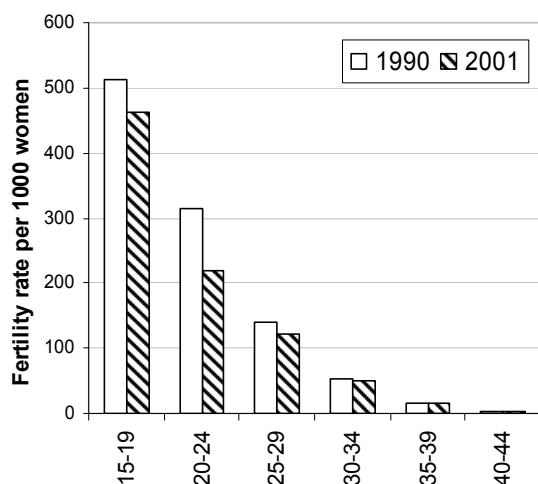
Until 1990, the share of children born out of wedlock in Slovakia oscillated around 5 - 7 %. A radical change occurred after 1990. The number of extramarital live-births increased from 6085 in 1990 up to 10 984 in 2002, what is nearly two-fold. The number of extramarital births has currently exceeded 21% from the total of births. Such increase of both the number and share of extramarital births is part of the shift towards the West European model of reproductive behaviour. Cohabitation, whether pre-marital or as an alternative for marriage, becomes a generally accepted and more and more ordinary phenomenon also in the Slovak population. The reason for a different development of marital and extramarital fertility is, on the one hand, the decreasing number of children in families and, on the other hand, the increasing number of long-term cohabitations (partners more frequently remain living in cohabitation even after the first child-birth).

The fertility of women is marked by decreasing tendencies in all age categories. The highest decrease of marital fertility from 1990 can be seen

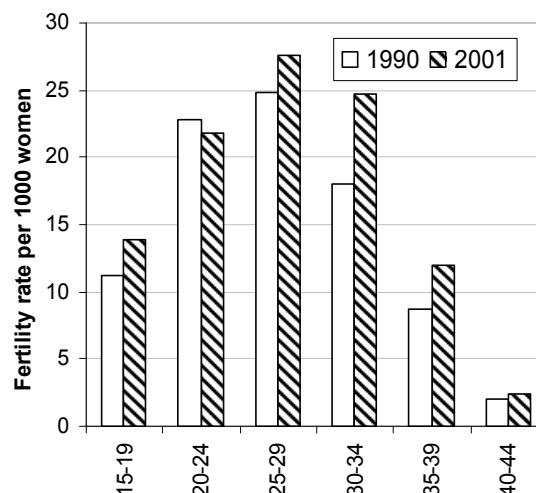
situation happened in the youngest category of women aged 15 – 19. These women were characterised by an increasing fertility trend until 2000, after this year a significant fall of fertility occurred, which was the consequence of the lower number of births in case of youngest women.

The highest fertility in the group of unmarried women is shifted to the age of 25 – 29, followed by the categories of women aged 30 – 34 and 20 – 24. All age groups of unmarried women recorded an increase in fertility, except for the group of women aged 20 – 24. A remarkable increase in the extramarital fertility is to be seen in the category of women aged 30 – 34.

**Graph 3.7: Fertility of married women by age**



**Graph 3.8: Fertility of unmarried women by age**



## Order of births

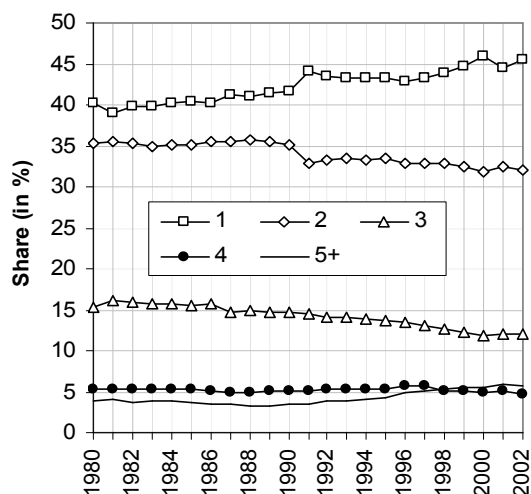
Another important indicator of both, the natality and fertility levels, is the structure of births by order. Prior to 1989, a two-child family model was preferred in the SR, where the share of births of third order stagnated and the share of births of higher order slightly decreased. Currently we can see a change in family size and number of children.

Since 1991 a slight increase of the share of child-births of first order can be recorded, on the contrary, the share of child-births of the second and third order is declining. The share of child-births of the fourth and higher order indicates since 1990 a moderately increasing tendency. The majority of child-births is of the first order, the highest fertility at the first birth is at the age of 25. In case of child-birth of second order, the age of mother is shifted towards 26-28 years and in case of child-births of the third order even up to 31 years. The shape of curves is similar; however, the fertility level in each order is different. It can be said that the current decline in natality is caused mainly by the development of child-births of second and third order.

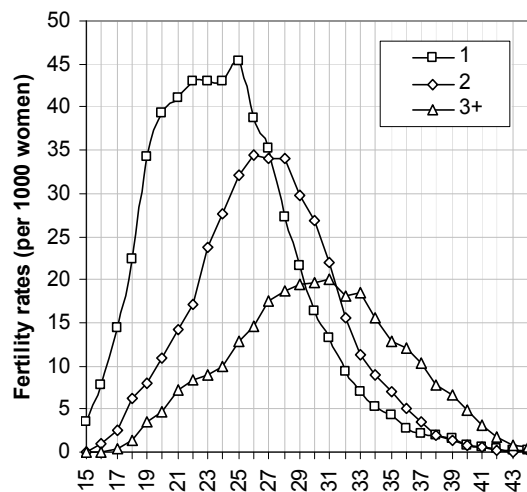
The differences can be observed also when inquiring the births in wedlock and extramarital births by order. The share of child-births of first order out of wedlock decreased from 60% at the beginning of nineties down to current 53,4%. Next orders of births out of wedlock indicate the level of 10% and less. It can be assumed that the decrease of the share of births of first order out of wedlock is caused also by an increasing number of long-term cohabitations. It means that probably the number of cohabitations is decreasing as the parents after the first child-birth get married.

With regard to the marital fertility, the tendencies do not basically differ from the development of the total fertility what is logical owing to the prevailing nature of the marital fertility. We can see the growth in the share of child-births of first order (40,2% in 1990 and 43,3% in 2002), decreasing tendencies in case of next two orders and again a moderate increase in child-births of fourth and fifth order. 78% children born in wedlock are child-births of first and second order.

Graph 3.9: Live-births by order



Graph 3.10: Fertility by order and age in 2002

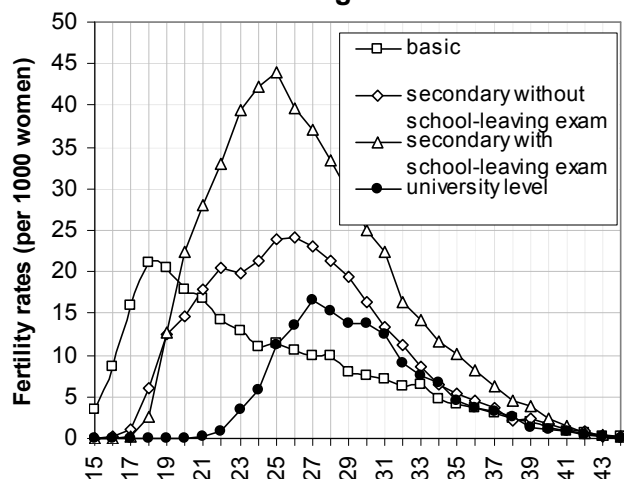


Tab. 3.4: Live-birth by order and marital status

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total										
1	36 487	33 348	26 604	25 786	25 559	25 274	25 143	25 240	22 751	23 131
2	31 674	28 146	20 582	19 768	19 401	18 961	18 194	17 601	16 621	16 331
3	13 931	11 718	8 343	8 108	7 765	7 325	6 926	6 554	6 167	6 098
4	4 815	4 043	3 241	3 483	3 325	2 942	2 889	2 709	2 582	2 414
5+	3 248	2 734	2 657	2 978	3 061	3 080	3 071	3 047	3 015	2 867
Total	90 155	79 989	61 427	60 123	59 111	57 582	56 223	55 151	51 136	50 841
Total (%)										
1	40,5	41,7	43,3	42,9	43,2	43,9	44,7	45,8	44,5	45,5
2	35,1	35,2	33,5	32,9	32,8	32,9	32,4	31,9	32,5	32,1
3	15,5	14,6	13,6	13,5	13,1	12,7	12,3	11,9	12,1	12,1
4	5,3	5,1	5,3	5,8	5,6	5,1	5,1	4,9	5,0	4,7
5+	3,6	3,4	4,3	5,0	5,2	5,3	5,5	5,5	5,9	5,6
In wedlock										
1	32 800	29 722	22 311	21 397	20 970	20 550	20 021	19 813	17 478	17 263
2	30 552	26 945	18 907	17 914	17 436	16 972	16 109	15 410	14 371	13 875
3	13 370	11 071	7 426	7 013	6 626	6 293	5 827	5 392	4 990	4 783
4	4 537	3 741	2 803	2 941	2 744	2 401	2 368	2 131	1 946	1 816
5+	2 974	2 425	2 233	2 428	2 412	2 539	2 418	2 336	2 246	2 120
Toatal	84 233	73 904	53 680	51 693	50 188	48 755	46 743	45 082	41 031	39 857
In wedlock (%)										
1	38,9	40,2	41,6	41,4	41,8	42,1	42,8	44,0	42,6	43,3
2	36,3	36,5	35,2	34,7	34,7	34,8	34,5	34,1	35,0	34,8
3	15,9	15,0	13,8	13,6	13,2	12,9	12,5	12,0	12,2	12,0
4	5,4	5,1	5,2	5,7	5,5	4,9	5,1	4,7	4,7	4,6
5+	3,5	3,3	4,2	4,7	4,8	5,2	5,2	5,2	5,5	5,3
Out of wedlock										
1	3 687	3 626	4 293	4 389	4 589	4 724	5 122	5 427	5 273	5 868
2	1 122	1 201	1 675	1 854	1 965	1 989	2 085	2 191	2 250	2 456
3	561	647	917	1 095	1 139	1 032	1 099	1 162	1 177	1 315
4	278	302	438	542	581	541	521	578	636	598
5+	274	309	424	550	649	541	653	711	769	747
Toatal	5 922	6 085	7 747	8 430	8 923	8 827	9 480	10 069	10 105	10 984
Out of wedlock (%)										
1	62,3	59,6	55,4	52,1	51,4	53,5	54,0	53,9	52,2	53,4
2	18,9	19,7	21,6	22,0	22,0	22,5	22,0	21,8	22,3	22,4
3	9,5	10,6	11,8	13,0	12,8	11,7	11,6	11,5	11,6	12,0
4	4,7	5,0	5,7	6,4	6,5	6,1	5,5	5,7	6,3	5,4
5+	4,6	5,1	5,5	6,5	7,3	6,1	6,9	7,1	7,6	6,8

## Education

**Graph 3.11: Fertility by education and age in 2002**



The level of education of population has also an impact on the fertility level. The age of highest fertility significantly depends on the graduation process which is still prolonging in the majority of population and becomes a competitor for the reproduction. The majority of child-births are registered in case of women with the secondary level of education, including the school-leaving exam, with the maximal fertility at the age of 25. Women with the basic level of education deliver their first child at a substantially lower age, prevailing until 20; at the age above 20 their fertility decreases. Fertility of women who graduate from secondary schools and universities is feasible at older age categories. Fertility of university educated women is until the age of 22 minimal; this group of women reaches its highest fertility at the age around 27.

**Tab. 3.5: Live-births by education and order**

	Basic	Secondary without school-leaving exam	Secondary with school-leaving exam	University	Total
1	3 599	5 244	11 034	3 254	23 131
2	2 192	4 694	7 224	2 221	16 331
3	1 594	1 930	2 102	472	6 098
4	1 029	710	557	118	2 414
5+	2 027	496	286	58	2 867
Total	10 441	13 074	21 203	6 123	50 841

## Fertility by regions

**Tab. 3.6: Basic characteristics of natality and fertility in regions of SR in 2001**

	Towns	Rural	Region							
			BL	TA	TC	NI	ZI	BC	PV	KI
Births	26 206	25 137	4 628	4 594	4 926	5 802	7 092	6 013	9 729	8 559
Live-births	26 106	25 030	4 614	4 578	4 911	5 780	7 072	5 986	9 693	8 502
Live-births in % (SR=100%)	51,0	49,0	9,0	9,0	9,6	11,3	13,8	11,7	19,0	16,6
Births out of wedlock (%)	25,8	23,6	22,9	18,6	15,3	25,5	12,5	38,5	21,9	42,2
Total fertility rate	1,062	1,415	0,982	1,019	1,034	1,032	1,287	1,148	1,543	1,385
Mean age at childbirth	26,9	26,0	27,7	26,3	26,9	26,2	26,8	26,0	26,3	25,9
Mean age at first childbirth	24,8	23,3	25,9	24,2	24,5	24,3	24,1	23,8	23,3	23,5

The number of live-births in urban and rural areas in 2001 differed only by nearly 1100 persons. Thus, the process where the number of births in rural areas approaches to the number of births in cities is ongoing (in 1996 this difference was even 3283 persons for the benefit of cities). On the other hand, fertility in cities is substantially lower than in other municipalities. The reason lies (similarly as in case of nuptiality) mainly in the different age structure of population<sup>7</sup>.

<sup>7</sup> A significantly lower number of women at the fertility age live in the country, thus, nearly the same number of live-births fall per a significantly lower number of women, what results in higher values of fertility in all age categories.

At regional level we can observe the breakdown of fertility into two groups. Regions in the North and East are marked by a higher fertility level, regions in the South and West by a lower fertility level<sup>8</sup>. The lowest fertility level is reported by the region of Bratislava, closely followed by the regions of Trnava, Nitra and Trenčín. In the region of Bratislava, the total fertility rate decreased in 2001 below the value of 1,0. The highest fertility is in the region of Prešov, followed, at a distance, by the regions of Košice and Žilina. The fertility in the region of Banská Bystrica oscillated in 2001 around the Slovak-wide average. In the region of Prešov, the fertility was higher by 57% than in the region of Bratislava. In regions with higher fertility, there is a lower average age of women at birth and vice versa.

---

<sup>8</sup> In addition to the urbanisation degree, style of living and standard of living, the religiosity of population belongs among main factors influencing natality. In the region of Žilina, the religious regions of Orava, Kysuce and Nether Liptov remarkably contribute to the increase of natality. In the region of Prešov, within the last census only 5,6% of population stated that they were unreligious (least of all provinces of the SR). On the contrary, the lowest natality in the regions of Bratislava and in South Slovakia is undoubtedly influenced by a higher share of unreligious population or by a lower share of population declaring them selves as Roman Catholics. Calvinism has a long tradition among Hungarian population in South Slovakia. Also the Lutheran traditions might have a certain impact (a zone of Revúca – Tisovec – Detva – Krupina – Štiavnica in the region of Banská Bystrica). Although Lutherans have not been enforcing a one-child family model, nevertheless, their number of children has been lower than in case of Catholic families.

## 4. Abortion

**Tab. 4.1: Basic characteristics of abortion**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total										
Abortions	45 594	56 176	35 879	30 885	27 798	26 658	25 557	23 593	22 792	22 141
Crude abortion rate	8,83	10,60	6,69	5,75	5,16	4,95	4,74	4,37	4,24	4,12*
Abortion ratio	50,3	69,9	58,2	51,2	46,8	46,1	45,2	42,6	44,4	43,4
General abortion rate	36,1	42,3	25,5	21,7	19,4	18,5	17,7	16,3	15,8	15,4*
Abortions per 100 terminated pregnancies	33,5	41,1	36,8	33,8	31,9	31,5	31,1	29,9	30,7	30,3
Mean age at abortion	28,65	28,33	28,22	28,28	28,29	28,21	28,77	28,76	28,82	28,97
Total abortion rate	1,155	1,426	0,895	0,766	0,684	0,652	0,622	0,570	0,552	0,536*
Spontaneous										
Abortions	9 311	7 739	6 470	5 712	5 480	5 549	5 608	5 125	4 766	4 759
Share on the total abortion (%)	20,42	13,78	18,03	18,49	19,71	20,82	21,94	21,72	20,91	21,49*
Crude abortion rate	1,80	1,46	1,21	1,06	1,02	1,03	1,04	0,95	0,89	0,88
Abortion ratio	10,3	9,6	10,5	9,5	9,2	9,6	9,9	9,3	9,3	9,3*
General abortion rate	7,4	5,8	4,6	4,0	3,8	3,9	3,9	3,5	3,3	3,3
Abortions per 100 terminated pregnancies	6,8	5,7	6,6	6,3	6,3	6,6	6,8	8,5	8,5	8,5
Mean age at abortion	26,81	26,37	26,61	26,81	26,95	26,99	27,14	27,81	27,02	28,32
Total abortion rate	0,233	0,198	0,141	0,140	0,134	0,134	0,135	0,122	0,114	0,114*
Induced										
Abortions	36 283	48 437	29 409	25 173	22 318	21 109	19 949	18 468	18 026	17 382
Share on the total abortion (%)	79,58	86,22	81,97	81,51	80,29	79,18	78,06	78,28	79,09	78,51*
Crude abortion rate	7,03	9,14	5,48	4,68	4,15	3,92	3,70	3,42	3,35	3,23
Abortion ratio	40,0	60,2	47,7	41,7	37,6	36,5	35,3	33,4	35,1	34,1*
General abortion rate	28,8	36,5	20,9	17,7	15,6	14,7	13,8	12,7	12,5	12,1
Abortions per 100 terminated pregnancies	26,6	35,5	30,1	27,6	25,6	25,0	24,3	25,0	25,9	25,4
Mean age at abortion	29,11	28,64	28,52	28,61	28,62	28,53	28,59	29,03	29,04	29,15
Total abortion rate	0,917	1,223	0,75	0,623	0,548	0,515	0,487	0,448	0,438	0,422*

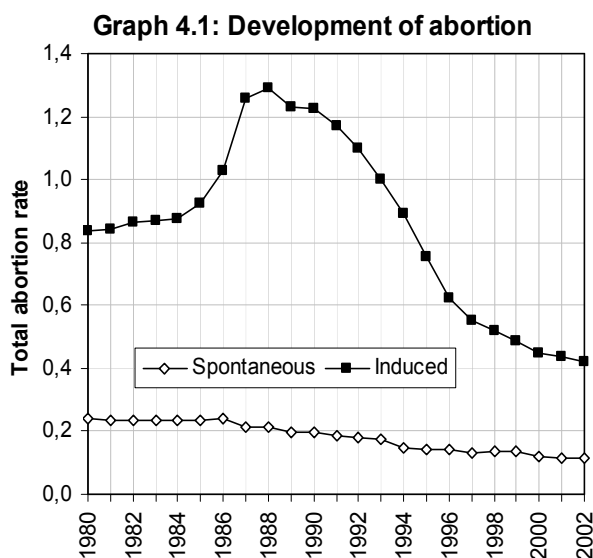
\* Preliminary data

Abortion is a demographic process, which negatively influences the reproduction of population, it reduces its dynamics. We can distinguish two main categories of abortion, i.e. spontaneous abortion and induced abortion. Spontaneous and induced abortion differs in their substance and level. Spontaneous abortion is determined mainly biologically, as well as by the level of health-care and the health condition of population. The induced abortion is of a completely different nature, which is related mainly to traditions, socio-economic conditions of population and legislation. Lingeringly we can say that induced abortion prevails over the spontaneous abortion.

A detailed monitoring of abortion started in Slovakia at the end of fifties of the 20<sup>th</sup> century. Abortions carried out until those times were mainly spontaneous, the induced abortions were made only due to health reasons and were of a very low intensity. A change occurred at the end of 1957 when the possibility for an induced abortion due to social reasons was legalized. Thus, the period of a continuous increase of abortion started which was interrupted only twice. Firstly, at the beginning of sixties, when the commissions for induced abortion were established, in front of which women had to reason their decision. Secondly, the increase in abortion was interrupted at the beginning of seventies due to the pro-natality measures adopted by the government. The period of the increase in abortion culminated in 1988, when 51 000 induced abortions were recorded. 61 induced abortions fell per 100 births, the total induced abortion rate reached the level of 1,3 and 35% of pregnancies were terminated by an induced abortion. Until 1988 we can observe in the SR an unfavourable trend in abortion, induced abortions often fulfilled the role of an additional contraception, due to less extended and weakly used contraception together with the absence of the sexual education and effective planning of parenthood.

The situation had changed after 1989 when the transformation of the social reasoning occurred, the issues related to planned parenthood, reproduction, sexual education, a more responsible behaviour of young generation and more widely used and easily available effective contraception were highlighted. All these aspects remarkably contribute to the fall in abortion.

The decreasing tendency in abortion has been recently confirmed in the SR. The highest decrease of intensity in abortion was observed at the beginning of nineties when the year-on-year shortages in abortions oscillated around 4-5 thousand abortions per year. Since 1997, the rate of decrease slowed down, but what was important, it did not stop. The shortages have been stabilised and currently they represent around 1000-2000 abortions annually. The number of abortions decreased from 56 176 in 1990 down to 22 141 in 2002, what is a shortage by 61%. Currently from 100 pregnancies nearly 8 end by a spontaneous abortion and approximately 25 are terminated by an induced abortion. Thus, one third of pregnancies end by an abortion, each fourth pregnancy is terminated by an induced abortion. However, the positive trend lies in the fact that the share of pregnancies which end by a child-birth is increasing. In 1990 the share of pregnancies which ended by a child-birth represented 60%; until 2002 it increased up to 70%.



In this time period we can observe also the separation of sexuality from reproduction due to the fact that contraception was much more effective and meant more than only the birth-control. The abortion development was in the past very closely connected to the development of fertility. During the recent years the situation has changed. A so called mirror relation, well-know from the past<sup>9</sup>, has been replaced by an independent relation. At both processes we can see the decreasing tendencies, however, both the rate and the level of decrease were not equal – abortion decreased sharper than the fertility.

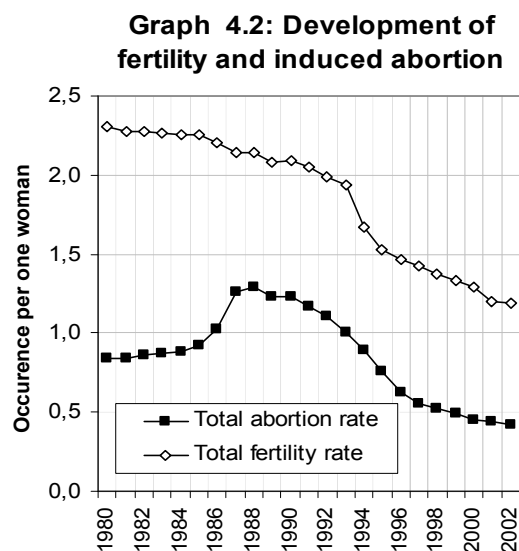
Development of fertility and abortion is indicated also by an abortion ratio<sup>10</sup>. In 1990 nearly 70 abortions fell per 100 births, until 2002 this number decreased down to 43 abortions. Mainly the induced abortion ratio has reduced radically (in 1990, 60 induced abortions fell per 100 births, currently „only“34).

## Age

An important indicator of the abortion level is the age of women. In different age categories different abortion intensity is recorded. At the beginning of nineties, a narrow peak of induced abortion can be observed; the highest induced abortion was reported in case of women aged 24 – 25. Until 2002 the level of induced abortion decreased in all age categories of women. At the same time a moderate shift of induced abortion towards the older age can be seen, what is related mainly to the growth of the mean age at marriage and at birth. While in 1990 the mean age of woman at the induced abortion was 28,6 years, until 2002 it increased up to the level of 29,1 years.

Spontaneous abortions have been falling by a slower rate as compared to induced abortions. The share of induced abortions in the total number of abortions decreased from 86% in 1990 down to 78% in 2002, what represented a shortage by 8 percentage points.

Analogically (as in the case of all abortions ) the highest decrease of induced abortion was recorded at the beginning of nineties when the new model of reproduction behaviour started, the market was penetrated by a modern and highly effective contraception and the sexual education and issues related to the planned parenthood drew a much more attention. The total induced abortion rate also complies with the favourable trend of abortion decrease. While in 1990 1,2 induced abortions fell per one woman at the fertility age, in 2002 only 0,4, what is to be considered as a decline of the average number of induced abortions per one woman by two thirds.



<sup>9</sup> Abortion and fertility were linked and recorded an opposite development. The decrease in fertility was accompanied and partially also caused by an increase in abortion and, on the contrary, the decrease in abortion was possible only if the fertility had increased.

<sup>10</sup> Abortion ratio relates the number of abortions and the number of births.



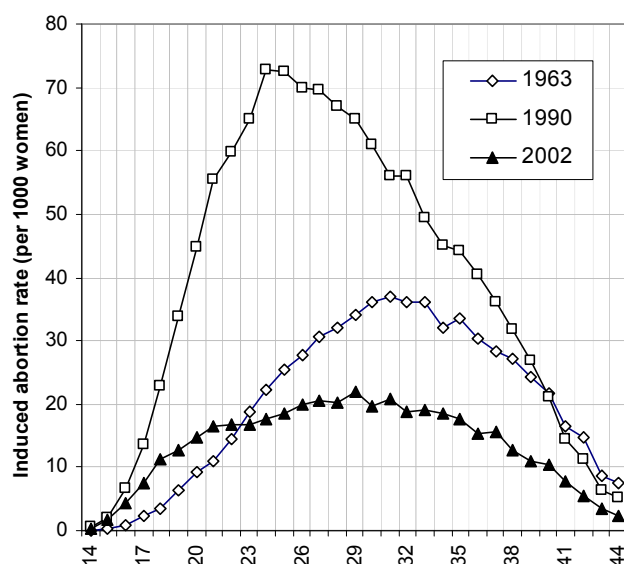
In 2002 no significant maximum of the level of induced abortion existed, as it had been the case before 1990. Currently the highest induced abortion rate is to be recorded in case of women aged 27-31 years. Differences between particular age groups of women are diminishing. The induced abortion curve for 2002 is much more balanced and rounded as it was in 1990.

**Tab. 4.2: Abortion rates by type and age (per 1000 women)**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002*
Induced abortion										
15-19	8,33	14,94	11,50	10,17	8,71	8,83	8,22	8,41	7,94	7,61
20-24	37,46	59,58	33,28	25,96	23,72	21,78	19,43	17,44	17,67	16,52
25-29	51,04	68,80	40,46	32,89	27,97	26,15	24,85	22,08	20,80	20,18
30-34	44,30	53,29	34,04	28,85	24,40	23,27	22,46	20,71	20,27	19,41
35-39	30,84	35,89	22,12	19,08	17,42	15,99	15,63	14,72	14,23	14,38
40-44	11,41	12,15	8,52	7,60	7,32	6,98	6,37	5,85	6,11	5,83
45-49	1,02	0,88	0,75	0,63	0,59	0,55	0,47	0,44	0,48	0,41
Spontaneous abortion										
15-19	3,62	4,49	3,03	2,79	2,59	2,65	2,44	2,21	2,16	1,96
20-24	15,53	14,06	8,94	8,69	7,71	7,63	7,21	6,35	5,28	5,10
25-29	12,53	10,01	7,46	7,28	7,53	7,40	7,88	7,13	6,65	6,66
30-34	8,19	6,00	4,82	4,96	4,72	4,81	5,21	4,65	4,72	4,86
35-39	4,39	3,45	2,76	3,05	2,92	3,09	3,08	2,91	2,81	2,89
40-44	2,08	1,45	1,12	1,14	1,15	1,13	1,04	1,06	1,12	1,13
45-49	0,31	0,17	0,15	0,12	0,16	0,12	0,13	0,15	0,09	0,15

\*Preliminary data

**Graph 4.3: Induced abortion by age**

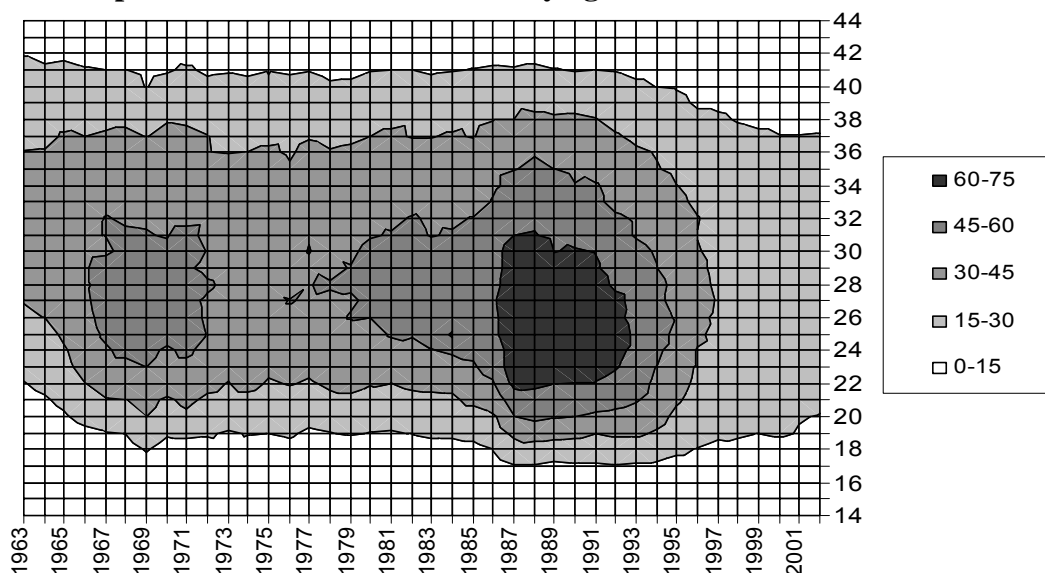
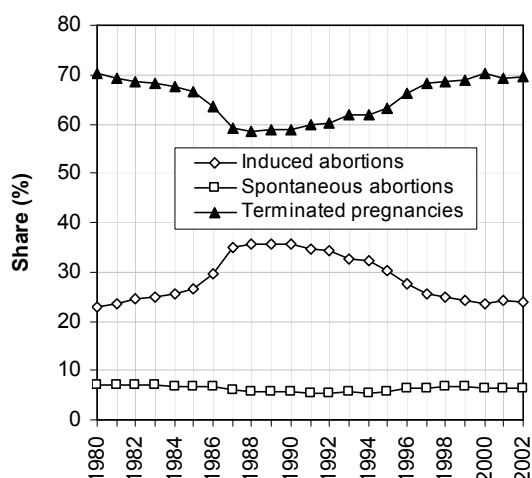
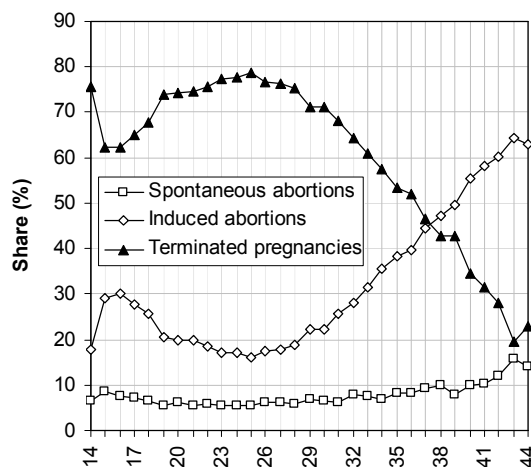


Lingeringly the highest level of induced abortion is to be seen in case of women aged 25 – 29, followed by age categories of women aged 30-34 and 20-24. The lowest level of induced abortion is kept by marginal women categories, i.e. the youngest women up to 19 years, who just enter the reproductive period and women above 40, who are nearly at the end of their reproductive period.

The highest decrease of induced abortion since the beginning of nineties until nowadays has been recorded in case of women aged 25 – 29; the decrease in this age group was more than three-fold. It is certainly to a great extent caused by better preventive measures from the part of these women as well as by the lower number of total realised pregnancies. With the increasing age of women both the abortion decrease rate and its level decline but the declining tendencies persist in all age categories. The decrease in the youngest category of women aged up to 19 should be valued very positively, mainly because it indicates a more responsible behaviour of the young generation, which

relies more on contraception than on the induced abortion.

In terms of the structure of terminated pregnancies, the births evidently prevail over abortions until the age of 25. After the 25<sup>th</sup> year of the woman's life the share of induced abortion starts to grow to the prejudice births and from the age of 37 the abortions start to prevail over births. The share of spontaneous abortions in the total number of terminated pregnancies is moving from 5 up to 10‰ with the increasing trend at the age of 40, so, in the older age categories, what is logical because the older age the multiple health risks and other complications might occur.

**Graph 4.4: Induced abortion rate by age****Graph 4.5: Structure of terminated pregnancies****Graph 4.6: Structure of terminated pregnancies by age in 2002****Tab. 4.3: Induced abortion rates by age and marital status (per 1000 women)**

	1985	1990	1995	1996	1997	1998	1999	2000	2001
<b>Married women</b>									
15-19	21,5	46,8	43,2	40,7	30,2	33,4	24,2	33,7	29,9
20-24	44,4	76,3	43,5	34,8	31,4	29,3	23,8	26,2	25,5
25-29	55,8	75,6	43,0	35,1	30,3	28,7	28,1	24,6	23,5
30-34	46,4	57,4	34,7	30,1	25,3	23,8	22,2	21,6	21,2
35-39	31,6	37,8	22,4	19,7	17,8	16,2	15,6	15,0	14,4
40-44	11,8	12,4	8,8	7,9	7,6	7,2	6,4	6,0	6,4
45-49	1,1	0,9	0,8	0,7	0,6	0,6	0,5	0,5	0,5
<b>Unmarried women</b>									
15-19	7,4	12,4	9,8	9,1	8,2	8,1	7,7	8,0	7,7
20-24	28,2	38,2	22,3	19,4	18,9	17,6	15,9	14,1	15,1
25-29	33,8	43,4	29,0	26,6	21,8	20,5	19,0	16,7	18,8
30-34	31,3	37,1	27,9	23,4	21,0	21,2	19,5	18,0	19,9
35-39	20,2	25,6	18,3	16,4	15,5	15,0	14,3	13,7	14,9
40-44	9,2	8,8	6,8	6,3	5,7	6,3	5,8	5,4	5,3
45-49	0,8	0,9	0,4	0,3	0,4	0,5	0,4	0,3	0,4

## Marital status and the number of children

The decrease in induced abortion can be observed in case of married as well as unmarried women; however, the intensity of this decrease is different. At the beginning of nineties married women aged above 25, who already had a child did not want another one, prevailed among applicants for an induced abortion (in 1990 their number represented 75% from all applicants for abortion). Very often women, who did not have any experience with contraception and thus abortion played a role of an additional contraception, were in question. Nowadays the share of these women is permanently diminishing; on the contrary, the share of unmarried women is increasing (currently 42%). It means that married women still prevail among the applicants for an induced abortion, however, not as unambiguously as it was the case in the past. We can observe the trends approaching the Western Europe where mainly single and childless women, who do not want a child yet, undergo the abortion. The new position of women in society has a certain merit of the changed situation. In the past women were not in favour of the possibilities of self-realization and did not have such access to modern contraception as it is the case now. In case of unmarried women at older age, who decide to undergo the abortion, the families (women), which are in a hard financial and economic situation and are, convinced that such a burden as the upbringing of child will be unbearable, might be in question.

**Tab. 4.4: Induces abortions by number of live-births and marital status**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002
Total										
0	4 124	6 070	4 578	4 841	4 565	4 719	4 508	4 493	4 558	4539
1	5 224	8 733	6 397	5 571	5 078	4 800	4 716	4 387	4 301	4204
2	16 223	22 780	12 805	10 267	8 627	7 844	7 287	6 494	6 086	5786
3+	10 712	10 854	5 629	4 494	4 048	3 746	3 438	3 094	3 081	2853
Total	36 283	48 437	29 409	25 173	22 318	21 109	19 949	18 468	18 026	17382
Total (%)										
0	11,4	12,6	15,6	19,2	20,5	22,4	22,6	24,3	25,3	26,1
1	14,4	18,0	21,8	22,1	22,8	22,7	23,7	23,8	23,8	24,2
2	44,7	47,0	43,5	40,8	38,6	37,2	36,5	35,2	33,8	33,3
3+	29,5	22,4	19,1	17,9	18,1	17,7	17,2	16,7	17,1	16,4
Married women										
0	219	464	336	553	516	596	556	536	603	643
1	3 847	6 676	4 517	3 901	3 472	3 164	3 137	2 857	2 682	2511
2	15 307	21 279	11 542	9 202	7 568	6 793	6 279	5 477	5 037	4708
3+	10 109	10 142	5 073	4 026	3 546	3 257	2 927	2 612	2 536	2276
Total	29 482	38 561	21 468	17 682	15 102	13 810	12 899	11 482	10 858	10138
Married women (%)										
0	0,7	1,2	1,6	3,1	3,4	4,3	4,3	4,7	5,6	6,3
1	13,1	17,3	21,0	22,1	23,0	22,9	24,3	24,9	24,7	24,8
2	51,9	55,2	53,8	52,0	50,1	49,2	48,7	47,7	46,4	46,4
3+	34,3	26,3	23,6	22,8	23,5	23,6	22,7	22,7	23,3	22,5
Unmarried women										
0	3 905	5 606	4 242	4 288	4 049	4 123	3 952	3 957	3 955	3896
1	1 377	2 057	1 880	1 670	1 606	1 636	1 579	1 530	1 619	1693
2	916	1 501	1 263	1 065	1 059	1 051	1 008	1 017	1 049	1078
3+	603	712	556	468	502	489	511	482	545	577
Total	6 801	9 876	7 941	7 491	7 216	7 299	7 050	6 986	7 168	7244
Unmarried women (%)										
0	57,4	56,8	53,4	57,3	56,1	56,5	56,0	56,6	55,2	53,8
1	20,2	20,8	23,7	22,3	22,2	22,4	22,4	21,9	22,6	23,4
2	13,5	15,2	15,9	14,2	14,7	14,4	14,3	14,6	14,6	14,8
3+	8,9	7,2	7,0	6,2	7,0	6,7	7,3	6,9	7,6	8,0

**Tab. 4.5: Induced abortions by order and marital status in 2002**

Order	Total	Married	Unmarried
1	11 360	6 115	5 245
2	3 829	2 507	1 322
3	1 443	994	449
4+	750	522	228
Total	17 382	10 138	7 244

The structure of applicants for induced abortion by the number of children starts to change too. At the beginning of nineties mainly women, who had two or more children and they did not want another one, underwent the induced abortion. The childless women less frequently decided to undergo the abortion. The share of childless and one-child women is more and more increasing nowadays. The number of induced abortions in case of women with two children and more is decreasing, although in Slovakia it is still the most numerous group of applicants for an induced abortion.

## Abortion by regions

**Tab. 4.6: Basic characteristics of abortion in the regions of SR in 2001**

	Towns	Rural	Region							
			BL	TA	TC	NI	ZI	BC	PV	KI
Total										
Abortions	14 197	8 595	2 618	2 243	2 245	3 110	2 515	3 380	2 640	4 041
Share of abortions (SR=100%)	62,3	37,7	11,5	9,8	9,8	13,6	11,0	14,8	11,6	17,7
Abortion ratio	54,2	34,2	56,6	48,8	45,6	53,6	35,5	56,2	27,1	47,2
General abortion rate	16,4	14,8	15,4	15,0	13,9	16,4	13,7	19,0	12,7	19,7
Mean age of women	29,2	28,7	29,4	28,9	29,5	28,8	29,4	28,5	29,3	28,9
Spontaneous										
Abortions	2 645	2 121	318	379	387	565	661	626	1 002	828
Share of abortions (SR=100%)	55,5	44,5	6,7	8,0	8,1	11,9	13,9	13,1	21,0	17,4
Abortion ratio	10,1	8,4	6,9	8,2	7,9	9,7	9,3	10,4	10,3	9,7
General abortion rate	3,1	3,7	1,9	2,5	2,4	3,0	3,6	3,5	4,8	4,0
Induced										
Abortions	11 552	6 474	2 300	1 864	1 858	2 545	1 854	2 754	1 638	3 213
Share of abortions (SR=100%)	64,1	35,9	12,8	10,3	10,3	14,1	10,3	15,3	9,1	17,8
Abortion ratio	44,1	25,8	49,7	40,6	37,7	43,9	26,1	45,8	16,8	37,5
General abortion rate	13,4	11,1	13,5	12,5	11,5	13,4	10,1	15,5	7,9	15,6

Abortion in the SR is remarkably territorially differentiated. Factors influencing abortion are similar as in the case of natality – urbanisation, standard of living, religiosity, while actually it is the religiosity which plays a relatively important role mainly in case of induced abortion.

When comparing the situation in cities and in the country, a higher number of abortions (spontaneous as well as induced) fall on cities, while the difference mainly in the number of induced abortions is significant (in 2001 in cities 64% and in rural areas 36%). The spontaneous abortion is higher in the country despite the fact that the number of spontaneous abortions is higher in cities (55%). The reasons lie in already mentioned differences in the age structure of population. In rural municipalities the share of women at the reproductive age is lower, what increases the level of spontaneous abortion. Another reason, which negatively influences the spontaneous abortion in the country, is the worse availability and equipment of health-care facilities as compared to the situation in cities. In terms of induced abortion, the values in cities currently prevail over the values in the country roughly by 20%, while the differences are quite fast to be balanced.

At the level of regions we can conclude on a decreasing tendency in spontaneous abortion as well as in induced abortion. The highest level of spontaneous abortion is reported by the regions of Prešov and Banská Bystrica, where more than 10 spontaneous abortions fall per 1000 women at the reproductive age. A noticeably lowest spontaneous abortion is registered in the region of Bratislava, followed by the region of Trnava. Other regions are situated closely to the nation-wide average.

When assessing the induced abortion we can divide the regions of Slovakia into two groups. The highest induced abortion is in the regions of Košice and Banská Bystrica; the group with higher abortion includes also the region of Bratislava and Nitra. The lowest induced abortion, at distance, is in the region of Prešov. The group with lower induced abortion involves also the remaining three regions, while the value of induced abortion in the region of Trnava, which is in this group the highest one, reaches the values approximately at the level of the nation-wide average. The interval being from 7,9 up to 15,6 abortions per 1000 women at reproductive age witnesses the great regional differences in the level of induced abortion; this interval characterises the difference between the lowest and highest induced abortion at the level of regions. At the level of regions the difference in abortion between two marginal levels is nearly two-fold, at the lower regional level the differences would appear obviously even to a greater extent.

## 5. Mortality

Mortality has been recently disappearing from the attention of public. It is considered as a stabilised process, to a great extent independent on the human will, by which an impression arises that it is hardly influenceable. It is obvious that it is necessary to know the regularities of this process and to determine its weaknesses in order to propose measures for the reduction of its negative impact.

Mortality causes the shortage of population, change in the population structure and in case of a decrease in mortality, it contributes also to the ageing of population. Mortality is not directly measurable, we can only discover its consequences (number of deaths, length of life, causes of death etc.), and possibly determine the impact of particular factors which influence its course. There is a series of such factors; however, the most important are the following: age, gender, marital status, environment, health-care and the life style. Of course it is not possible to investigate the impact of all these factors, inter alia, also because of the lack of information. Thus, we shall concentrate on the investigation of the mortality level from the most important standpoints, i.e. by age, sex and causes of death.

**Tab. 5.1: Basic characteristics of mortality**

		1985	1990	1995	1996	1997	1998	1999	2000	2001	2002
Deaths	males	28 613	30 263	28 128	27 535	27 788	28 630	28 102	28 157	27 705	27 415
	females	23 851	24 356	24 558	26 701	24 336	24 526	24 300	24 567	24 275	24 117
	total	52 464	54 619	52 686	54 236	52 124	53 156	52 402	52 724	51 980	51 532
Crude death rate		10,16	10,31	9,82	9,53	9,68	9,86	9,71	9,76	9,66	9,58*
Standardised death rate <sup>11</sup>		10,72	10,55	9,82	9,46	9,49	9,57	9,25	9,17	9,13	8,89
Life expectancy at birth	males	66,92	66,65	68,39	68,87	68,89	68,61	68,95	69,14	69,51	69,86*
	females	74,73	75,43	76,33	76,80	76,72	76,70	77,03	77,22	77,54	77,63*
	total	7,81	8,78	7,94	7,93	7,83	8,09	8,08	8,08	8,03	7,77*
Life expectancy at the age 50	males	22,13	21,64	22,66	22,90	22,98	22,81	22,91	23,04	23,19	23,35*
	females	27,66	28,06	28,59	29,04	28,92	28,93	29,14	29,18	29,39	29,66*
	total	5,53	6,42	5,93	6,14	5,94	6,12	6,23	6,14	6,20	6,31*
Life expectancy at the age 65	males	12,29	12,22	12,68	12,86	12,91	12,76	12,89	12,91	13,00	13,28*
	females	15,36	15,71	16,07	16,41	16,37	16,28	16,47	16,38	16,64	16,86*
	total	3,07	3,49	3,39	3,55	3,46	3,52	3,58	3,47	3,64	3,58*
Infant mortality rate		16,32	11,99	10,99	10,23	8,70	8,79	8,31	8,58	6,24	7,63

\* Preliminary data

The basic development tendencies in the development of mortality from post-war years are sufficiently known. A sharp improvement in mortality in fifties was replaced by stagnation and worsening from sixties until eighties, followed by a moderate re-improvement in nineties. The social transformation has undoubtedly contributed to this recent tendency, which forces the people to a more responsible behaviour and thus also to a higher accountability for their health. Obviously this improvement is quite slow what is the result of the biological persistence, i.e. long-term impacts influencing the human health. It can be illustrated by the decrease of deaths from 1995 until 2002 (only by 2,2%) or by taking the example of the decrease of crude death rate from 9,82‰ in 1995 only to 9,58‰ in 2002. These values, however, do not point out the real scope of the mortality decrease because they do not take into account changes in the age structure of population, thus, it is more appropriate to use more relevant characteristics, which are independent or less dependent on the external impacts. Such indicators are: the standardised crude death rate or a synthetic mortality characteristic – life expectancy. If the age structure remained at the level of 1995, based on the standardised crude death rate we could say that in 2002 47, 8 thousand people would die (8, 89‰), what is by 3,7 thousand people less than actually died and by 10,2% less than died in 1995. This is the real consequence of the decrease in the intensity of mortality.

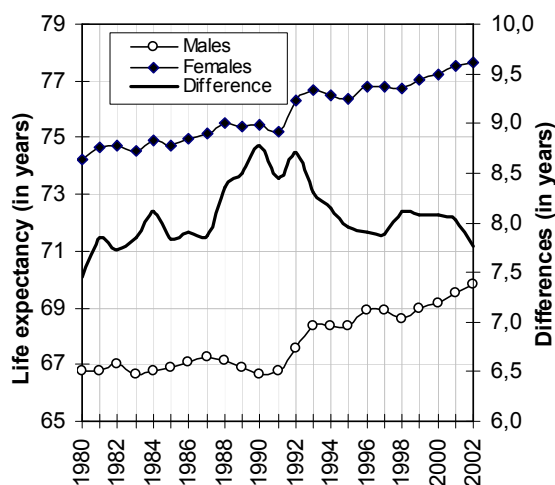
### Life expectancy at birth

The decrease in the intensity of mortality can be calculated also from another already mentioned indicator – from the life expectancy at birth, when during 1995 until 2002 its length for men had been prolonged by 1,5 years and for women by 1,3 years, what represented an increase of 2,1% and 1,7% respectively. The difference between the life expectancy at birth for men and women diminished in 2002 to 7,8 years. In 1995 the difference was 7,9 years to the prejudice of men, while during 1998 - 2000 it was even 8,1 years. A bit higher intensity of the mortality decrease can be found if the life expectancy at the age of 50 and at the age of 65 is taken into account. For the period from 1995 until 2002 the value for men aged 50 had increased by 3%, for women aged 50 by 3,6%; in case of men aged 65 the

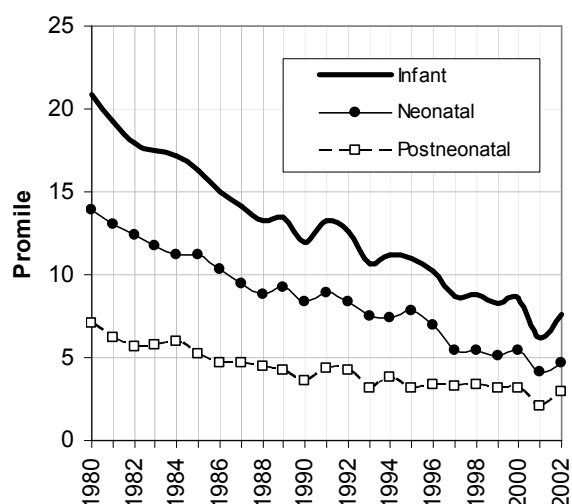
<sup>11</sup> Standard population: age structure of SR at 1.7.1995

increase was 4,5% and if women at the age of 65 were concerned, it had increased by 4,7%. The presented trends indicate two things, firstly, that the intensity of mortality should be investigated in a more detailed way according to the age and, secondly, that owing to the higher percentage increase of the indicators in case of women, the excess male mortality is increasing at older age.

**Graph 5.1: Life expectancy at birth**



**Graph 5.2: Mortality during the first year of life**



## Mortality during the first year of life

**Tab. 5.2: Mortality during the first year of life**

			1985	1990	1995	1996	1997	1998	1999	2000	2001	2002
Deaths	Up to 1 year	males	856	568	388	338	285	278	259	280	185	189
		females	615	391	287	277	229	228	208	193	134	199
		total	1 471	959	675	615	514	506	467	473	319	388
	Up to 28 days	males	580	404	280	236	186	173	166	173	125	109
		females	425	265	203	179	135	137	123	124	86	129
		total	1 005	669	483	415	321	310	289	297	211	238
	Up to 7 days	males	476	325	199	160	117	108	118	114	91	79
		females	353	208	137	117	88	102	78	84	72	91
		total	829	533	336	277	205	210	196	198	163	170
Mortality rates	Infant	males	18,53	13,81	12,35	10,89	9,38	9,41	9,02	9,92	7,00	7,27
		females	13,99	10,06	9,56	9,53	7,97	8,13	7,56	7,17	5,43	8,02
		total	16,32	11,99	10,99	10,23	8,70	8,79	8,31	8,58	6,24	7,63
	Neonatal	males	12,56	9,82	8,91	7,60	6,12	5,86	5,78	6,13	4,73	4,19
		females	9,67	6,82	6,76	6,16	4,70	4,89	4,47	4,61	3,48	5,20
		total	11,15	8,36	7,86	6,90	5,43	5,38	5,14	5,39	4,13	4,68
	Early neonatal	males	10,31	7,90	6,33	5,15	3,85	3,66	4,11	4,04	3,44	3,04
		females	8,03	5,35	4,56	4,02	3,06	3,64	2,84	3,12	2,92	3,67
		total	9,20	6,66	5,47	4,61	3,47	3,65	3,49	3,59	3,19	3,34
	Postneonatal	males	5,98	3,99	3,44	3,29	3,26	3,55	3,24	3,79	2,27	3,08
		females	4,32	3,24	2,80	3,37	3,27	3,25	3,09	2,56	1,94	2,82
		total	5,17	3,63	3,13	3,33	3,27	3,40	3,17	3,19	2,11	2,95
	Perinatal	males	15,68	12,97	10,56	9,11	8,46	8,12	8,53	8,12	7,61	6,78
		females	13,37	10,19	8,10	7,98	6,66	8,87	7,56	6,77	6,78	7,50
		total	14,55	11,62	9,36	8,56	7,58	8,49	8,06	7,46	7,21	7,13

In the period from 1995 until 2002 we can generally speak about the decrease of mortality during the first year of life. The components of this decrease were as follows: the infant mortality rate fell from 10,99% down to 7,63%, the early neonatal mortality rate decreased from 5,47% to 3,34%, the neonatal mortality rate declined from 7,96% to 4,68%, the postneonatal mortality rate dropped from 3,13% to 2,95% and the perinatal mortality rate was reduced from 9,36% down to 7,13%. However, if we take gender into account, we shall see big differences between the changes in the intensity of mortality during the first year of life for boys and girls. During 1995-2002 the infant mortality rate for boys fell by 70,0%, while for girls only by 19,3%, the early neonatal mortality rate for boys decreased by 108,6%, for girls by 24,5%, the neonatal mortality rate for boys dropped by 112,7%, while for girls

only by 30,2%, the perinatal mortality rate for boys declined by 55,7%, for girls only by 8,0%. Relatively the worst results report the postneonatal mortality rate, when during 1995-2002 there was a reduction by 11,8% for boys, while for girls even an increase by 0,7% was recorded. These differences result from the unfavourable development of mortality during the first year of life between the years 2001 and 2002 where the worsening of all indicators in case of girls can be found. As for boys, the worsening appears only in case of postneonatal mortality rate what, however, was caused also by the increase of infant mortality rate of boys.

## Age and gender

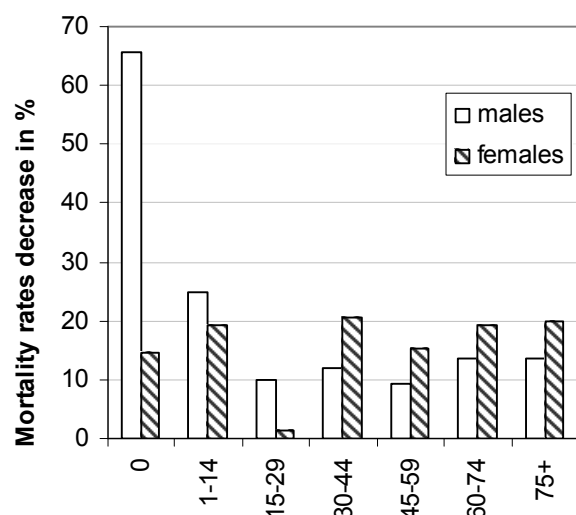
**Tab. 5.3: Mortality rates by age groups (per 1000 males or females)**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002*
Males										
0	18,81	14,02	12,01	10,92	9,36	9,35	8,95	9,91	6,87	7,25
1-4	0,62	0,50	0,44	0,54	0,50	0,57	0,50	0,48	0,54	0,34
5-9	0,45	0,31	0,31	0,26	0,29	0,29	0,27	0,21	0,30	0,30
10-14	0,33	0,27	0,28	0,27	0,31	0,27	0,31	0,30	0,30	0,20
15-19	0,85	0,84	0,75	0,65	0,77	0,70	0,59	0,58	0,54	0,61
20-24	1,30	1,31	1,10	1,14	1,20	1,20	1,13	1,09	0,92	1,04
25-29	1,47	1,48	1,32	1,29	1,25	1,26	1,23	1,26	1,22	1,16
30-34	2,09	2,22	1,66	1,59	1,70	1,79	1,67	1,71	1,69	1,53
35-39	3,14	3,44	2,74	2,44	2,71	2,69	2,53	2,37	2,45	2,40
40-44	5,31	5,90	4,85	4,31	4,58	5,08	4,76	4,21	4,25	4,34
45-49	9,00	9,90	7,58	7,44	7,36	7,93	7,34	7,34	7,12	7,26
50-54	14,36	15,71	12,63	12,13	12,56	12,23	12,36	12,19	11,42	11,54
55-59	19,42	21,83	19,10	18,31	18,42	18,94	18,43	17,57	17,50	17,36
60-64	30,45	32,84	29,79	29,10	27,43	28,47	28,75	28,08	28,20	25,64
65-69	41,71	46,38	42,33	42,16	41,06	42,11	40,79	41,20	40,47	38,21
70-74	63,15	62,81	62,63	63,40	63,46	63,09	60,20	60,63	59,90	55,15
75-79	97,53	94,04	88,79	82,60	86,20	89,59	90,02	87,56	83,73	83,75
80-84	147,73	143,25	133,29	136,33	131,04	137,36	127,31	126,82	127,78	122,65
85+	231,74	214,80	221,12	203,97	202,51	197,80	192,61	195,27	219,13	223,92
Females										
0	14,12	10,13	9,25	9,44	7,97	8,08	7,53	7,13	5,25	8,08
1-4	0,52	0,50	0,44	0,30	0,41	0,56	0,33	0,30	0,32	0,34
5-9	0,26	0,21	0,19	0,23	0,22	0,19	0,23	0,19	0,14	0,18
10-14	0,22	0,22	0,18	0,17	0,12	0,21	0,20	0,15	0,14	0,17
15-19	0,32	0,37	0,30	0,29	0,34	0,31	0,23	0,33	0,31	0,29
20-24	0,39	0,41	0,25	0,26	0,33	0,28	0,34	0,27	0,24	0,29
25-29	0,54	0,49	0,42	0,29	0,33	0,40	0,39	0,38	0,40	0,36
30-34	0,61	0,68	0,66	0,62	0,58	0,64	0,50	0,39	0,52	0,49
35-39	1,28	1,28	0,98	0,98	1,06	1,03	0,98	0,86	0,82	0,75
40-44	1,93	1,98	1,61	1,56	1,66	1,66	1,50	1,53	1,55	1,45
45-49	3,45	3,16	2,58	2,71	2,71	2,56	2,79	2,54	2,67	2,49
50-54	5,20	5,16	4,76	4,08	4,59	4,24	4,32	3,96	4,03	3,73
55-59	8,59	8,29	7,04	6,75	7,28	6,90	6,77	6,22	6,52	6,43
60-64	12,88	12,56	12,20	11,55	11,10	11,13	10,68	10,65	10,33	9,87
65-69	20,99	21,70	20,35	19,56	19,24	19,11	18,25	17,84	17,21	17,09
70-74	38,29	34,97	34,44	32,25	33,28	31,82	30,56	31,27	30,51	29,18
75-79	65,49	61,91	56,71	55,58	55,97	57,33	57,88	56,30	55,08	53,08
80-84	113,23	106,32	105,12	99,42	102,02	103,64	95,25	97,86	91,71	89,64
85+	202,29	186,08	190,85	182,80	181,69	182,17	180,29	182,48	197,38	198,39

\* Preliminary data



**Graph 5.3: Mortality decrease between years 1995 and 2002**



The mortality development at particular age groups can be traced also by the mortality rates by age. During 1995-2002 we can talk about the decrease in mortality in case of both genders. The exception was only the age group of women aged 20-24, in case of which an increase occurred by 14, 8%. However, one has to take here into account also the sensitivity of calculation on small numbers of deaths.

If we compare the change in the intensity of mortality at particular age groups for men and women, we shall find a faster mortality decrease until the age of 30 for men than for women, on the contrary, at the age of 30 and over the decrease in case of women is faster than in case of men.

**Tab. 5.4: Excess male mortality by age groups**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002*
0	133	138	130	116	117	116	119	139	131	90
1-4	120	101	100	179	122	102	149	159	171	100
5-9	169	146	161	115	130	153	116	107	220	170
10-14	155	124	157	160	254	132	159	205	220	117
15-19	268	230	251	229	225	225	256	173	174	214
20-24	336	320	444	444	362	431	328	411	380	359
25-29	271	301	312	442	381	315	313	331	307	318
30-34	341	325	253	254	294	280	338	437	324	315
35-39	245	269	280	250	256	262	258	276	298	321
40-44	275	297	302	277	277	307	319	275	273	299
45-49	261	313	294	274	271	310	263	289	267	292
50-54	276	304	265	298	274	288	286	308	283	309
55-59	226	263	271	271	253	274	272	282	268	270
60-64	236	261	244	252	247	256	269	264	273	260
65-69	199	214	208	215	213	220	224	231	235	224
70-74	165	180	182	197	191	198	197	194	196	189
75-79	149	152	157	149	154	156	156	156	152	158
80-84	130	135	127	137	128	133	134	130	139	137
85+	115	115	116	112	111	109	107	107	111	113

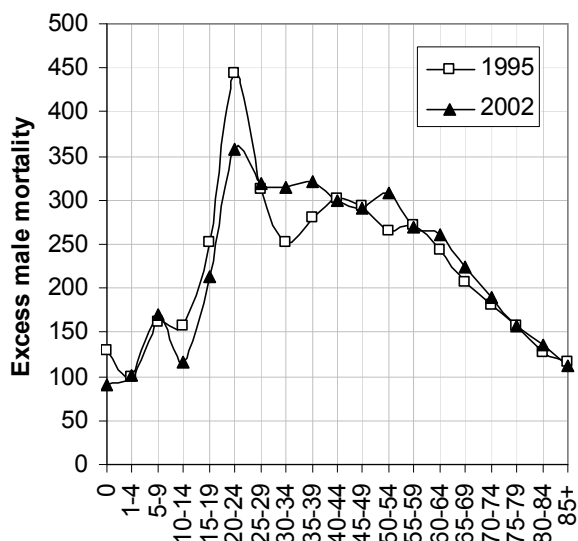
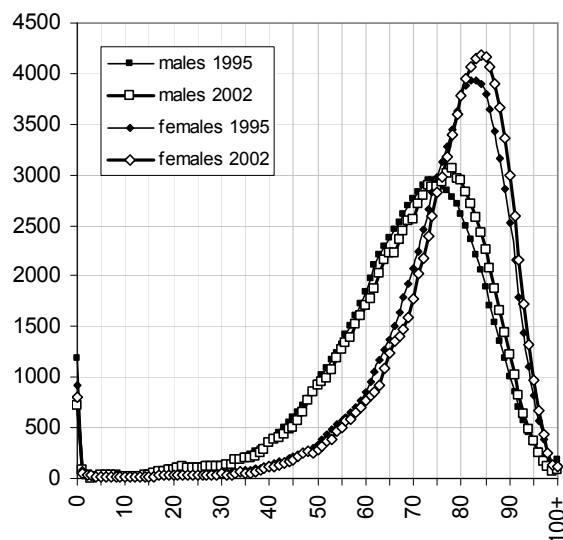
\* Preliminary data

This fact has influenced also the development of the excess male mortality. We have found out the decrease of excess mortality at the age of 10-24 and an increase in the age groups of 30-39 and 50-54. These changes, however, do not influence the already existing high excess male mortality. Within the age interval of 15-70, the mortality of men is more than two-fold as compared to women. In 2002, the lower or the same mortality of boys as compared to girls at the age until four years, resulting partially from the already mentioned development during the first year of life, is to be mentioned.

Another demonstration of the mortality development by age is the concentration of deaths to the older age. This fact can be illustrated by the development of the tabular numbers of deaths<sup>12</sup>. From 1995 until 2002, the age at which the majority of people died, had shifted for men from 74 years up to 78 years and for women from 83 up to 84 years. The deaths of men are concentrated into a broader interval as in the case of women, what is the result of already mentioned high excess male mortality until the age of 70.

<sup>12</sup> Number of deaths out of 100000 births by age, based on life tables.



**Graph 5.4: Excess male mortality by age groups****Graph 5.5: Tabular number of deaths**

## Causes of death

Specific differences can be found when investigating the mortality development by causes of death. We have traced five most frequently occurring causes of death, i.e. neoplasms, circulatory system diseases, respiratory system diseases, digestive system diseases and external causes of death. In 2002 these five causes of death covered 93,9% from total deaths of men and 93,5% from total deaths of women.

In case of men the circulatory system diseases caused 48,1% of deaths (of which ischemic heart diseases 53,8% and cerebral vascular diseases 16,7% ). Due to neoplasm, 24,7% of men died. The external causes brought about 8,9% deaths of men (of which 24,9% were traffic accidents and 25,4% men died due to deliberate self-destroying); digestive system diseases caused 6, 4% of deaths and respiratory system diseases caused 5,9%. During 1995 – 2002 this structure did not significantly change.

In 2002, even 61, 7% from total number of dead women fell on the circulatory system diseases, of which 52,5% fell on ischemic heart diseases and 17,2% on the cerebral vascular diseases. 19,6% of total dead women died due to neoplasm, 5,4% due to respiratory system diseases, 4,3% due to the digestive system diseases and 2,5% due to external causes, of which 30,3% died because of traffic accidents and 16,8% due to deliberate self-destroying. Since 1995 this structure, in contrast to men, had changed, i.e. the share of the external causes of death decreased by 69, 2% from the value of 4, and 2% in 1995 to the already mentioned value of 2, and 5% in 2002. It is the consequence of a significant decrease of the number of registered falls within the framework of the external causes of death in case of women. The decrease of the share of the cause of death due to respiratory system diseases by 33,3% and the increase of the share of a cause of death due to digestive system diseases is worthwhile to mention too.

Now we shall assess the development of the intensity of mortality in the time interval of 1995 up to 2002 by causes of death by using the standardised mortality rates. We can conclude on a general, insignificant decrease in the intensity of mortality for both genders except for the cause of death due to digestive system diseases, where in case of men there is an increase by 7,2% and for women by 16,7%. The excess male mortality, however, can be shown in all cases. The highest is in case of external causes where in 2002 the male mortality was 4,7 times higher than the female mortality, while due to traffic accidents it was 3,7 higher and due to self-destroying even 7,3 times higher. A relatively low excess male mortality is in case of circulatory system diseases (only 1, 5 times) and it hasn't practically changed since 1995. However, if we look at the components of this cause of death, we shall find out that although the excess male mortality due to ischemic heart diseases is decreasing (from 1,7 times in 1995 to 1,6 times in 2002), it increases due to cerebral vascular diseases, i.e. from 1,3 times in 1995 up to 1,5 times in 2002.

As we have already mentioned, the concentration of deaths into older age is also the demonstration of the development of mortality intensity. This tendency appears also when the causes of death are taken into account and we can illustrate it by comparison of mean ages at death in 1995 and 2002. In all causes of death the mean age at death is increasing, except for the external causes of death (especially traffic accidents), where the mean age is shifted to the younger age at both genders.

**Tab. 5.5: Deaths by causes**

[illegible]

**Tab. 5.6: Standardized deaths rates by cause of death<sup>13</sup>**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002
<b>Males</b>										
Neoplasms	2,58	2,86	2,99	3,01	2,94	3,21	3,07	3,01	2,99	2,83
Malignant neoplasms	x	x	2,97	2,99	2,91	3,20	3,06	2,99	2,98	2,82
Circulatory system diseases	6,76	7,19	6,73	6,47	6,50	6,66	6,25	6,19	6,23	6,05
Ischemic heart diseases	x	x	3,58	3,45	3,44	3,33	3,26	3,42	3,40	3,29
Cerebrovascular diseases	x	x	1,13	1,09	1,08	1,14	1,00	0,98	1,01	1,01
Respiratory system diseases	1,67	1,06	0,92	0,96	0,90	0,63	0,69	0,75	0,73	0,74
Digestive system diseases	0,62	0,86	0,64	0,60	0,58	0,67	0,69	0,71	0,67	0,69
External causes of death	1,10	1,21	1,06	1,02	1,07	1,03	0,93	0,93	0,92	0,90
Accidents	x	x	0,28	0,25	0,32	0,33	0,26	0,26	0,24	0,22
Intentional self-harm	x	x	0,24	0,22	0,20	0,22	0,22	0,22	0,22	0,22
Other causes of death	1,04	0,94	0,67	0,61	0,59	0,63	0,76	0,71	0,68	0,69
Total	11,92	14,13	13,01	12,65	12,58	12,83	12,40	12,29	12,23	11,91
<b>Females</b>										
Neoplasms	1,34	1,37	1,41	1,38	1,43	1,48	1,44	1,46	1,42	1,36
Malignant neoplasms			1,39	1,37	1,41	1,47	1,43	1,45	1,41	1,36
Circulatory system diseases	4,66	4,50	4,45	4,20	4,25	4,42	4,15	4,12	4,15	3,99
Ischemic heart diseases	x	x	2,06	1,99	2,01	2,06	2,05	2,20	2,16	2,09
Cerebrovascular diseases	x	x	0,90	0,79	0,78	0,80	0,70	0,67	0,69	0,68
Respiratory system diseases	0,84	0,56	0,52	0,53	0,54	0,30	0,31	0,35	0,33	0,35
Digestive system diseases	0,30	0,31	0,25	0,24	0,25	0,26	0,29	0,26	0,28	0,30
External causes of death	0,32	0,35	0,33	0,32	0,31	0,23	0,22	0,22	0,20	0,19
Accidents	x	x	0,08	0,07	0,07	0,08	0,07	0,06	0,06	0,06
Intentional self-harm	x	x	0,04	0,04	0,04	0,03	0,03	0,04	0,04	0,03
Other causes of death	0,79	0,71	0,48	0,43	0,41	0,47	0,51	0,45	0,44	0,49
Total	8,24	7,80	7,45	7,10	7,19	7,16	6,91	6,86	6,80	6,70
<b>Excess male mortality</b>										
Neoplasms	193	209	212	218	206	217	213	206	211	208
Malignant neoplasms	x	x	214	218	206	218	214	206	211	207
Circulatory system diseases	145	160	151	154	153	151	151	150	150	152
Ischemic heart diseases	x	x	174	173	171	162	159	155	157	157
Cerebrovascular diseases	x	x	126	138	138	143	143	146	146	149
Respiratory system diseases	199	189	177	181	167	210	223	214	221	211
Digestive system diseases	207	277	256	250	232	258	238	273	239	230
External causes of death	344	346	321	319	345	448	423	423	460	474
Accidents	x	x	350	357	457	413	371	433	400	367
Intentional self-harm	x	x	600	550	500	733	733	550	550	733
Other causes of death	132	132	140	142	144	134	149	158	155	141
Total	145	181	175	178	175	179	179	179	180	178

**Tab. 5.7: Mean age at death by cases of death**

	Males		Females	
	1995	2002	1995	2002
Neoplasms	65	66	67	68
Malignant neoplasms	65	66	67	67
Circulatory system diseases	71	72	78	79
Ischemic heart diseases	71	73	78	80
Cerebrovascular diseases	72	73	77	79
Respiratory system diseases	69	70	74	77
Digestive system diseases	59	59	67	67
External causes of death	47	46	61	51
Accidents	41	40	45	42
Intentional self-harm	46	47	48	52
Other causes of death	40	54	57	61
Total	65	66	73	74

<sup>13</sup> Standard population: age structure of SR at 1.7.1995

**Tab. 5.8: Decomposition of the life expectancy at birth increase between 1995 and 2002 by gender, age and causes of death**

	Males*					Females*				
	0-34	35-64	65+	Total		0-34	35-64	65+	Total	
Neoplasms	0,05	0,24	0,00	0,29	20%	0,02	0,06	0,01	0,09	7%
Circulatory system diseases	0,03	0,34	0,33	0,70	47%	0,00	0,36	0,46	0,82	63%
Respiratory system diseases	0,06	0,07	0,05	0,18	12%	0,09	0,06	0,14	0,29	22%
Digestive system diseases	0,00	-0,04	-0,02	-0,06	-4%	0,00	-0,06	-0,03	-0,10	-8%
External causes of death	0,09	0,07	0,04	0,20	13%	0,05	0,03	0,11	0,18	14%
Other causes of death	0,26	-0,09	0,00	0,17	11%	0,02	0,00	-0,01	0,01	1%
Total	0,49	0,58	0,40	<b>1,47</b>	100%	0,17	0,45	0,68	<b>1,30</b>	100%
	33%	40%	27%	100%		13%	35%	52%	100%	

\* Preliminary data

**Tab. 5.9: Decomposition of the life expectancy at birth increase between males and females in the years 1995 and 2002 by age and causes of death**

	1995					2002*				
	0-34	35-64	65+	Total		0-34	35-64	65+	Total	
Neoplasms	0,03	1,08	0,86	1,98	25%	-0,01	0,91	0,97	1,88	24%
Circulatory system diseases	0,09	1,66	1,17	2,92	37%	0,06	1,65	1,21	2,91	37%
Respiratory system diseases	0,01	0,19	0,21	0,42	5%	0,03	0,18	0,27	0,47	6%
Digestive system diseases	0,03	0,48	0,12	0,63	8%	0,03	0,51	0,13	0,67	9%
External causes of death	0,63	0,82	0,11	1,56	20%	0,60	0,81	0,14	1,54	20%
Other causes of death	0,21	0,15	0,06	0,43	5%	-0,04	0,27	0,07	0,30	4%
Total	1,01	4,39	2,54	<b>7,94</b>	100%	0,67	4,32	2,78	<b>7,77</b>	100%
	13%	55%	32%	100%		9%	56%	36%	100%	

\* Preliminary data

In previous parts we have investigated various changes in the intensity of mortality differentiated by the causes of death, age and also by sex. However, the real relevance can be investigated only on the basis of the extent of their contribution to the change in the life expectancy at birth.

As it already has been mentioned, the life expectancy for men during 1995-2002 increased by 1,47 years. The decisive role in this increase was played by the decrease in the intensity of mortality in the age group of 35-64 years. This decrease caused the prolongation of the life expectancy at birth by 0,58 years what represents even 40% of the total prolongation. Furthermore, the following contributed to the prolongation of life expectancy: the decrease in the intensity of mortality related to the circulatory system diseases (a contribution of 0,34 years) and to the neoplasm (a contribution of 0,24 years). The decrease in the intensity of mortality due to circulatory system diseases in the age group of 65 years and more, which represents 3,3 years, also non-negligibly contributed to the prolongation of life expectancy at births of men. On the contrary, the increased mortality due to digestive system diseases had a negative impact on the development of life expectancy at birth, which caused its shortening by 4%.

As far as women are concerned, the situation is slightly different. The decrease in the intensity of mortality in the age group of 65 and over (by 0,68 years, i.e. 52% from the total prolongation) has the main impact on the prolongation of life expectancy at birth (by 1,3 years); of which the decrease of mortality due to circulatory system diseases contributed to this prolongation by 0,46 years. This cause of death in total contributed to the prolongation of life expectancy at birth of women by an enlargement of 0,82 years, what represents 63%. One has to suggest also the impact of the mortality due to respiratory system diseases (contribution by 0,14 years) and due to external causes of death (contribution by 0,11 years) in the age group of 65 and over. Similarly as in case of men, also for women one can see the negative impact of the increase of mortality due to digestive system diseases, which caused the reduction of the life expectancy at birth of women by 8%.

In a similar way it is possible to discover the reasons for the difference in the life expectancy at births of men and women, which represented in 2002 7,7 years. The highest impact on this big difference has the excess male mortality due to the circulatory system diseases (contribution of 2,91 years), due to neoplasms (contribution being 1,88 years) and due to external causes of death (contribution of 1,54 years). From the age point of view, those influences are concentrated into the age group of 35-64 (54%) and into the age group of 65 and over (36%). It is worthwhile to mention a relatively high impact of the mortality due to external causes of death at the age of 34, which represents 0,6 years. If we compare the differences in life expectancy at births of men and women in 1995 and 2002 we shall discover a similar structure of both, the impact of age and causes of death. The decrease of the difference from the

level of 7,94 in 1995 to 7,77 in 2002 can be assigned to the change in mortality due to other illnesses at the age until 34. While in 1995 the impact represented 0,21 years, in 2002 it was -0,04 years. It is the consequence of already mentioned higher mortality of girls in the perinatal period.

## Mortality by regions

**Tab. 5.10: Basic characteristics of mortality in regions of SR in 2001**

	Towns	Rural	Region							
			BL	TA	TC	NI	ZI	BC	PV	KE
Males										
Deaths	12 974	14 731	2 828	2 844	2 975	4 152	3 607	3 905	3 596	3 798
Share of deaths (SR = 100%)	46,8	53,2	10,2	10,3	10,7	15,0	13,0	14,1	13,0	13,7
Infant mortality rate	6,05	7,99	3,75	6,42	6,48	6,57	5,43	6,11	8,56	9,84
Standardised death rates <sup>14</sup>	11,91	14,22	11,27	12,96	11,66	13,83	13,89	14,32	12,56	13,24
Females										
Deaths	11 639	12 636	2 725	2 582	2 591	3 826	2 834	3 311	3 030	3 376
Share of deaths (SR = 100%)	47,9	52,1	11,2	10,6	10,7	15,8	11,7	13,6	12,5	13,9
Infant mortality rate	5,17	5,69	4,96	4,02	4,10	4,02	3,84	6,26	5,78	8,47
Standardised death rates <sup>14</sup>	7,06	7,41	6,81	7,54	6,68	7,61	6,94	7,44	7,13	7,59
Excess male mortality										
Infants	117	140	76	160	158	164	141	98	148	116
Total	169	192	165	172	175	182	200	192	176	174

As we have already mentioned, mortality is significantly related to the age structure of population. It is therefore appropriate to inquire the particularities of this process also by regions and by type of settlement. In 2001, from the quantitative standpoint the majority of deaths was registered in the region of Nitra (15,3% from the total number of deaths in the whole territory of Slovakia). Next places are occupied by the regions of Banská Bystrica (13,9%) and Košice (13,8%). The lower number of people died in the regions of Trnava and Bratislava (10,4% and 10,7% respectively). 47,4% people died in cities and 52,6% in the rural areas.

From the qualitative point of view it is suitable to characterise mortality by the infant mortality and by the standardised crude mortality rate separately for men and women. The mortality of children up to one year is the highest in the region of Košice, where the infant mortality reaches 9,17‰, and in the region of Prešov, where it represents 7,22‰. The most favourable situation is in the region of Bratislava, where the mentioned infant mortality reaches only 4,33‰ and in the region of Žilina, where it amounts to 4,67‰. From the gender standpoint, the highest differences between the mortality of boys and girls are in the region of Nitra, where the mortality of boys is higher by 64% as compared to the mortality of girls.

A higher mortality can be disclosed also in the majority of regions, except for the region of Bratislava and Banská Bystrica. In the region of Bratislava, the mortality of girls is higher by 24% and in the region of Banská Bystrica by 2%. The infant mortality is lower in cities as compared to the country, regardless the gender. The higher mortality is typical also for urban and rural municipalities.

In the term of total mortality we can speak about the worst situation in the region of Banská Bystrica, where the standardised mortality rate is the highest one. In contrast, the most favourable situation is in the region of Bratislava, where the value of this indicator is the lowest one (lower by 20% as compared to the region of Prešov). Regarding the gender the situation is completely different. While in case of men the mortality was the highest also in the region of Banská Bystrica and the lowest in the region of Bratislava, in case of women, the highest mortality was recorded in the region of Nitra and the lowest in the region of Trenčín. These differences influence also the excess male mortality. The highest one is in the region of Žilina, where the mortality of men is by 100% higher as compared to the mortality of women; the lowest is in the region of Bratislava, where it represents 65%. The breakdown to urban and rural areas does not show anything surprising. It can be said that the mortality in the country is higher regardless the gender. The excess male mortality is 92% in the country and 69% in cities.

<sup>14</sup> Standardised population: age structure of SR at 1.7.2001



## 6. Migration

At the turning point of 1980's and 1990's of the previous century, the new trends in migration appeared. Opening of borders after the fall of „iron curtain“ allowed the Slovak Republic (until those times emigratory one) to rank among the countries which benefit from migration. The split of Czechoslovakia changed the nature of the mutual migration between the Czech Republic (CR) and the Slovak Republic (SR) – from the internal migration to the external migration and brought an increased exchange between both republics. Since the half of 1990's the intensity of this migration has significantly decreased, however, the migration relations between the CR and SR remain above standard.

Opening of borders at the same time has brought new possibilities for travelling of the citizens of Slovakia to abroad. Mainly the move in terms of job-seeking is in question, which usually is not linked to the change in permanent residence. At the same time Slovakia becomes a more open country as well as the more interesting country for the migrants from other countries. Some of them are seeking the possibilities for business, but the substantial part of these migrations is formed by the migration for the purposes of family reunion.

Since 1996 the number of migrating foreigners has been remarkably increasing, especially from economically weaker and politically unstable countries. Firstly the foreigners from Balkan countries and some countries of the former Soviet Union were in question; currently the foreigners from Asia, mainly from Afghanistan, are prevailing. The Slovak Republic has become a „buffer country“ between the Schengen Agreement countries and risky world areas, which are lingeringly source areas for the emigration to Europe.<sup>15</sup>

In the field of internal migration the decrease in the intensity of migration continued also in 1990's, mainly to longer distances. The change in socio-economic conditions caused that the concentration tendencies in internal migration had been step-by-step diminishing and started to change into de-concentration tendencies. With regard to the undeveloped market with dwellings, the commuting, even to longer distances, has intensified (daily, weekly commuting, etc.).

### Migration across the borders of the Slovak Republic

The external migration, which is monitored by the Statistical Office of the SR (SOSR), is to be understood as the migration defined in terms of a change of the place of permanent residence, at which the crossing of state borders occurs. It is based on the registration of the given person for the permanent residence, or his/her deregistration.

**Tab. 6.1: Migration across the borders of the Slovak Republic**

Migration	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002
without the Czech Republic										
immigrants	314	944	1 558	1 484	1 436	1 275	1 216	1 006	1 033	1 563
emigrants*	429	867	105	133	360	495	410	501	613	962
net migration	-115	77	1 453	1 351	1 076	780	806	505	420	601
with the Czech Republic										
immigrants	5 753	7 674	1 497	993	867	777	856	1 268	990	749
emigrants*	8 930	10 073	108	89	212	251	208	310	398	449
net migration	-3 177	-2 399	1 389	904	655	526	648	958	592	300
total										
immigrants	6 067	8 618	3 055	2 477	2 303	2 052	2 072	2 274	2 023	2 312
emigrants*	9 359	10 940	213	222	572	746	618	811	1 011	1 411
net migration	-3 292	-2 322	2 842	2 255	1 731	1 306	1 454	1 463	1 012	901

\* incomplete recording

Remark: In 1985 and 1990 migration between the SR and the CR was a part of the internal migration

During the whole post-war time period (except for 1954) until the formation of an independent state, the SR had been recording losses from the external migration. Also in those times, it had been mainly losing by the migration to the CR (in 1980's around 3,5 thousand people annually). The legal migration exchange with the rest of the world in this time period was at the level of only several tenths of people and was oriented towards the former socialist block. Relatively strong migration flows between the CR and SR, which were a part of internal migration, damped out after the split of Czechoslovakia, however, as a part of international migration. In 1993 the migration flows were still high in both directions. Many citizens from the former Czechoslovakia have made hard decisions in which country they

<sup>15</sup> Illegal migration <http://www.minv.sk/statistiky/uhcp1/nelegalna.htm>

would live. Mainly the families of the mixed pairs of Czech and Slovak nationality were in questions. The immigrants to the SR from the CR represented in 1993 80 % of all immigrants of the SR and nearly the entire emigration wave from the SR of this year (7276 people, i.e. 99 %) was directed to the CR. This migration exchange has been step-by-step weakening and the reliability of data on emigration has worsened. It can be evidenced also by the data from SOSR on the number of emigrants from the SR to the CR and by the data of the Czech Statistical Office (CSO) on the emigrants from the CR to the SR, which are very low since 1994.

The increase in population from external migration has been during the existence of the independent SR variable. The lowest was in 2002, when the SR acquired by this migration only 901 people. According to the data of the SOSR, also the CR contributed mainly to this increase. However, by the split of Czechoslovakia the registration of emigrants from the SR as well as from the CR has worsened<sup>16</sup>. If we instead of data from the SOSR on the number of emigrants from the SR use the data from CSO on the number of immigrants from the SR, the SR will be still losing also from such migration.

**Tab. 6.2: Estimate of migration between the SR and the CR (change of permanent residence)**

	1985	1990	1995	1996	1997	1998	1999	2000	2001
immigrants*	x	x	1 497	993	867	777	856	1 268	990
emigrants**	x	x	3 845	3 450	3 088	2 887	3 235	2 826	3 078
net migration	x	x	-2 348	-2 457	-2 221	-2 110	-2 379	-1 558	-2 088

\* Immigrants from the CR – according to the CSO;

\*\* Emigrants from the SR – according to the CSO on immigrants from the SR to the CR, in 2001 including long-term stays

From the formation of the independent SR even 80-90% of all immigrants to the SR were represented by immigrants from Europe until 2001; however in 2002 this share decreased and reached only 75%. The number of immigrants from America increased (10,1% in 2002). Also the number of immigrants from Asia had been gradually increasing and after certain damping in 2000-2001, it reached approximately 13%, in 2002, mainly thanks to the immigrants from Vietnam. The numbers of immigrants from Africa and Australia and Oceania are negligible.

**Tab. 6.3: Regional structure of immigrants from abroad**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Africa	30	48	28	31	29	25	37	33	21	35
America	227	192	203	173	141	137	127	192	202	235
Australia a Oceania	49	63	35	45	36	46	18	16	22	30
Asia	193	149	82	112	133	133	163	70	118	301
Europe	8 453	4 467	2 707	2 115	1 964	1 709	1 716	1 963	1 659	1 711
Total*	9 106	4 922	3 055	2 477	2 303	2 052	2 072	2 274	2 023	2 312
European union	362	294	304	272	223	199	218	170	243	237
EFTA states	61	57	67	48	54	51	30	41	38	35
New EU members from 2004	7 333	3 232	1 574	1 072	937	844	953	1 323	1 055	816
EU candidate states**	73	139	118	248	138	121	95	85	71	104
Ukraine a Russia	411	503	499	357	455	359	266	217	156	211

\* Total number of immigrants is increased by immigrants with unspecified country of origin

\*\* Bulgaria, Romania, Turkey

From the regional standpoint the majority of immigrants come to the SR from countries, which will be the new EU member countries. Their share in the total number of immigrants from Europe reaches currently almost 50% and is changing in relation to the number of immigrants from the CR. The next immigrants are essentially coming from only two countries – Hungary and Poland. However, in 2002 the number of immigrants from each of these countries did not exceed 40 people.

The immigrants from EU member countries currently represent around 14% of the total immigrants from Europe; mainly the immigrants from Germany and Austria, then from Italy and Great Britain are in question. However, the numbers of immigrants from particular countries recently reach only several tenths of people. The immigration from Switzerland, which is not an EU member country, is at the similar level.

<sup>16</sup> Obviously not all emigrants from the SR have deregistered themselves in the SR from the permanent residence. A similar situation is not only in the CR but also in the migration of several other countries.



From the candidate countries for the accession to the EU – Bulgaria, Romania and Turkey – 104 people emigrated to the SR in 2002, mostly from Romania. In addition to the immigrants from the CR, the highest numbers of immigrants had been recorded by the SR from Ukraine and Russia. After denouncing the non-visa agreement (with Ukraine in the half of 2000 and with Russia at the end of 2000) the number of immigrants from these countries temporarily decreased, however, in 2002 an increase was recorded again. Unlike the other countries, in the structure of immigrants from Ukraine and Russia women are prevailing.

Around 90% of immigrants from America represent the immigrants from Canada and USA. Among immigrants men are prevailing. In the structure of immigrants from Asia men are prevailing too. Except for 2001, the most numerous group of immigrants was from Vietnam, in 2001 from Israel.

Generally speaking, men aged 25-29 and women aged 20-39 prevail in the structure of immigrants. The reason for migration is mainly the contracting of marriage or the follow-up of family relatives. In case of immigrants from the CR, the follow-up of the family relative is prevailing, what is reflected also in the structure of immigrants, of which it is obvious that also families with children are moving. Among the immigrants the citizens from the SR prevail, in 2002 they represented 80% of all immigrants.

**Tab. 6.4: Main source countries of external migration (number of immigrants)**

	1985		1990		1995		1997		1998		1999		2000		2001		2002	
	num.	rank	num.	rank	num.	rank	num.	rank	num.	rank	num.	rank	num.	rank	num.	rank	num.	rank
Czech Republic	5753	1.	7674	1.	1497	1.	867	1.	777	1.	856	1.	1268	1.	990	1.	749	1.
Yugoslavia <sup>1</sup>	32	5.	71	4.	110	5.	84	6.	87	5.	110	3.	66	6.	60	6.	217	2.
Ukraine <sup>2</sup>	.	.	.	.	393	2.	363	2.	268	2.	180	2.	161	2.	124	2.-3.	148	3.
USA	13	7.-8.	61	5.	72	8.	39	12.	45	11.	57	8.	108	3.	124	2.-3.	123	4.
Germany <sup>3</sup>	13	7.-8.	56	8.	145	3.	93	3.	93	3.	100	4.	74	4.	97	4.	86	5.
Canada	7	10.	37	10.	114	4.	86	5.	74	6.	59	7.	73	5.	68	5.	71	6.
Austria	9	9.	48	9.	75	7.	51	9.	39	12.	39	10.	37	10.	49	7.	64	7.
Macedonia <sup>4</sup>	.	.	.	.	9	21.	14	20.	15	22.	23	15.	25	13.	16	18.	63	8.-9.
Russia <sup>5</sup>	87	2.	183	2.	106	6.	92	4.	91	4.	86	5.	56	7.	32	10.	63	8.-9.
Romania	14	6.	120	3.	67	9.-10.	82	7.	65	7.	32	11.	49	8.	44	8.	56	10.

<sup>1</sup> In 1985 and 1990 part of former Yugoslavia, from 1995 data for Federal Republic of Yugoslavia

<sup>12</sup> In 1985 and 1990 part of former USSR

<sup>13</sup> In 1985 and 1990 data without former GDR

<sup>14</sup> In 1985 and 1990 part of former Yugoslavia

<sup>15</sup> In 1985 and 1990 data without former USSR

The problem of statistics on migration, as it has already been mentioned, is related too much underestimated data on emigrants. However, from the available data of the SOSR, the main directions of emigration can be determined at least. The major part of emigration from the SR is still directed to the CR. In 1995, less than 50 people annually were oriented to the EU member countries. Since 1997 this number had been gradually increasing and in 2002 it reached the level of 386 people. At the same time the emigrants to Germany and Austria represented even 71% from emigrants to the EU.

The emigrants to Europe represent 80-90 % of all emigrants from the SR. In the structure of emigrants women are prevailing. For example in 2002, women represented almost 64% of all emigrants, of which women aged 20-34 formed 40% of all emigrants from the SR and even two thirds of women emigrated from the SR. Contracting of marriage is nearly 8 times more frequent reason for emigration in case of women than in case of men. Also among the emigrants the citizens of the SR prevail, in 2002 only 5% of emigrants did not have the citizenship of the SR.

The external migration in terms of a change in the place of permanent residence, registered by statistical bodies, records the move of Slovak citizens and part of foreigners as immigrants and emigrants (who registered and/or deregistered themselves for a permanent residence).

Data on the total number of foreign citizens, who live in the territory of the SR based on the residence permit, are recorded by the statistics of Border and Foreigner's Police Bureau. The foreigners are allowed to stay in the territory of the SR based on the residence permit – permanent<sup>17</sup> or temporary. In addition, persons who leave (mainly for the purposes of job-seeking), without changing their place of residence, represent a major part of migrants. The specific

<sup>17</sup> Only those foreigners, who enter the territory of the SR legally, have a permanent residence permit and, at the same time, are registered as permanent residents, are recorded in the migration statistics of the SOSR as immigrants. The emigrants are covered by the statistics only if they have deregistered from the permanent residence in the SR.

category of foreign migrants is represented by foreigners, to whom the asylum is granted and foreigners, to whom a tolerated stay is offered. A significant group of persons in the Slovak territory is formed also by illegal migrants. The major part of the foreign migration is formed by a so called labour migration.

The number of foreigners living the SR on the basis of both for long-term and permanent residence permit has been stabilised during the last five years and moves around 29 thousand persons. In 2001, there were 29 thousands foreigners with the residence permit, what is, as compared for example with the Czech Republic, a very low number. There were only five foreigners per 1000 inhabitants in the SR while in the CR it was around 20 foreigners.

**Tab. 6.5: Foreigners with the long-term stay in the SR**

Foreigners	1994	1995	1996	1997	1998	1999	2000	2001
- with new long-term stay	4 073	3 688	3 506	4 073	4 718	4 428	3 620	3 843
- with all long-term stay	5 946	7 907	5 898	9 325	10 855	11 640	11 391	12 131

**Tab. 6.6: Foreigners with the permanent residence in the SR**

Foreigners	1993	1994	1995	1996	1997	1998	1999	2000	2001
- with new permanent residence	1 030	2 392	3 027	1 936	2 101	1 628	1 433	1 002	880
- with all permanent residence	7 775	11 000	14 002	15 584	17 099	17 564	17 848	17 410	17 287

Long-term stays were permitted mainly for the purposes of business, employment and studies. The majority of people with the long-term and permanent residence permits lived in the region of Bratislava, in 2002 their number was even 8 235 people. The adaptation of the rules for residence to the standards of the EU<sup>18</sup> had brought extensive changes into this area. Thus, according to the Border and Foreigner's Police Office, the data on the permitted stays for 2002 are available at the different structure.

<sup>18</sup> Since 1 April 2002, a new Act No.48/2002 Coll. on the residence of foreigners has entered into force. According to this Act, the foreigner is allowed to enter the territory of the SR without visas if it is stated by an international agreement, by which the SR is bound or if it stated so by the government of the SR, or based on the granted visa. From the length of duration standpoint, the most remarkable visas are the short-term ones (for the stay until 90 days in the same half-year) and long-term visas (for stay being longer than 90 days in the same half-year). According to the new Act of Law, one can distinguish the following types of stays:

- temporary
- permanent
- tolerated

A *temporary stay* is granted to foreigners for time required for the acquisition of the purpose, however at maximum for one year, for the purposes of business, employment, study or the activities according to special programmes (e.g. for the scientific activities etc.) and due to family reunion. If the temporary stay is for visiting or tourist purposes and does not exceed 90 days in the same half-year, the foreigner is allowed to stay in the territory of the SR based on visa or dispensing with visas.

A *permanent residence permit* can be granted to the foreigner for the purposes of the family reunion, in specific cases also for business purposes and employment or if falls into the scope of international policy interests of the SR. For the decision on granting the permit is important that the foreigner would not be a burden for both the social security and health-care systems of the SR. The Act of Law at the same time contains measures, which should prevent the purpose-built marriages, contracted only in order to receive the permit for the permanent residence.

A *tolerated stay* is the newly established institute for the stay of foreigners in the territory of the SR; it has been introduced for those foreigners, who would not have stayed in the SR if they had not been forced to do so by circumstances independent on their will (e.g. temporary shelter or if their departure is not possible and, at the same time, there is no reason to arrest them etc.), for 180 days at maximum.

The Act of Law No. 48/2002 Coll. on the residence of foreigners individually and above-standard solves the stay of the citizens of the EU member countries in the territory of the SR. The citizens of the EU possess the right for a temporary stay in the SR based on the registration for the purposes of business, employment, study and the performance of activities related to the pre-accession advisory in the framework of the process of integration of the SR into the EU and for the purposes of the family reunion.

**Tab. 6.7: Residence permits granted to foreigners in the SR for 2002**

	New residence permits	All residence permits
Permanent stay	226	13 997
Long-term stay	573	4 617
Temporary stay	2 469	6 716
Registered stay	651	1 050
Next permanent stay	865	3 111
Tolerated stay	15	14
Total	4 799	29 505

Remark: Up to 31.3.2002 according to Act No. 73/1995 Coll. and since 1.4.2002 according to Act No. 48/2002 Coll.

In 2002, mainly the family reunion (91,6%) represented the reason for the permanent residence; the reasons for other types of residence were mainly the business, employment or studies. From the regional point of view, the majority of foreigners with the residence permit lived in 2002 in the region of Bratislava (28%) and in the region of Košice (16%). According to the citizenship, mainly the people from the CR and Ukraine (18% and 16% respectively) were allowed to stay in the SR, furthermore from Poland, Romania and Vietnam; from the EU member countries it was only Germany (3%).

After the fall of „iron curtain“, also in the SR the part of legal migration is formed by an extraordinary types of stays, which permit the foreigners to stay legally in the territory of the SR – as *refugees*,<sup>19</sup> or as de-facto refugees.

During the period of 1992-2002, 23 018 people had asked for asylum in Slovakia, and in the first quarter of 2003, another 1887 people asked for it. The asylum was granted to 536 people, of which the citizenship of the Slovak Republic was later granted to 99 people.

**Tab. 6.8: Refugees and the asylum applicants in the SR**

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Total
Asylum applicants*	87	96	140	359	415	645	506	1 320	1 556	8 151	9 743	23 018
Refugees**	56	39	55	67	129	65	49	27	11	18	20	536
Refugees with granted SR citizenship	0	0	0	0	4	15	21	2	0	10	47	99

The number of asylum applicants sensitively reacts to the changes in the political and economical situation in the world. In 2001-2002, the number of asylum seekers rapidly increased mainly in connection with the unstable situation in Afghanistan and in the Middle East. The total number of applicants during these last two years achieved the level of nearly 18 thousand, what was 78% from the total of applicants from the beginning of the asylum granting in the SR. At the same time, in case of nearly 17 thousand people the proceeding has been ceased. The reason lied mainly in the fact that foreigners tried to leave the SR illegally before the end of the asylum proceeding. This situation is persisting also now because the economic migrants, for whom Slovakia is just a transiting country, in which they will stay only for a short time and make every effort to get to Austria, Germany and to other countries.

The majority of asylum applicants were from Afghanistan. In 2001 their number was almost 4315 people, what was more than one half of all applicants, of whom only 7 people were granted refugee status and in 2820 cases the proceeding was ceased. Another numerous groups were represented by the applicants from India (1111 people), Iraq (990 people) and from Bangladesh (429 people). In 2002 the majority of applicants came from China - 1764 citizens of China asked for asylum. The number of applicants from Afghanistan decreased down to 1669 people but, on the other hand, the number of applicants from India increased (by 1611 people), from Iraq (by 1245 people) and from Bangladesh (by 1032 people). However, this year only 20 people in total have received the asylum in the SR.

Among applicants for asylum men significantly prevail (more than 80%). Approximately three quarters of the number of these foreigners are aged 18-40. The foreigners are allowed to stay in the territory of the SR also temporary – as de-facto refugees, when they are provided with a temporary shelter for their protection against the war conflict in the country of origin or of the latest permanent residence. During 1993-1997 the SR had provided a temporary shelter to approximately 2400 citizens of the former Yugoslavia and in 1999 also to 500 de-facto refugees from Kosovo.

<sup>19</sup> The terminology used was in connection to the Act of Law No. 408/2002 Coll. The accession into, and stay of these migrants in, the territory of the SR had been solved by the Act of Law No. 283/1995 on refugees in the sound of the later regulations and since 1 January 2001 by the Act of Law on asylum No. 480/2002 Coll. The whole asylum proceeding is supported by the Migration Office of the Ministry of Interior of the SR.

The SR is offering also a humanitarian aid in form of displacement. During 1993-1998 it was offered to the inhabitants of Slovak origin from the Chernobyl area in Ukraine. These *displaced people* received get the permanent residence permit in the territory of the SR and the same legal status as if they were the citizens of the SR, except for the right to vote and the military service. Within the framework of this displacement, 311 families with 1078 people, of whom 312 children, were displaced from Ukraine to the SR.

The entire picture on the external migration of the Slovak Republic is completed by the illegal forms of migration.<sup>20</sup> Currently the borders of the SR are marked by a higher pressure of illegal migrants. This pressure is related, as it has already been mentioned, to the unstable situation in some Asian countries. Owing to the direction of illegal migration moves, the SR is, however, a transiting country. Illegal migrants come prevailing from the economically weaker countries and their final destination is one of the Western Europe countries, mainly Germany, Netherlands and Belgium, thus, from Slovakia they travel either to Austria or to the CR. In 2000, more than 6 thousand of illegal migrants tried to cross the Slovak borders, however, in the following next two years their number was higher than 15 thousand people yearly. The most numerous groups of people taken through the borders were from Afghanistan (6,1 thousand people in 2001 and 2,8 thousand people in 2002), India (2,5 thousand and 2,4 thousand people respectively), Iraq (1,5 and 1,7 thousand people respectively, and China (0,3 and 2,4 thousand people respectively). In addition, for example in 2001, there were almost 1000 people detained, who were staying in the territory of the SR illegally.

The most frequent reasons for the long-term stay permit (and later for a temporary stay) of the foreigner in the SR were business or employment. The regulation of employment of foreigners was carried out on the basis of a permit for employment in case of the individual employment and based on the bilateral agreements on the mutual employment of nationals. The SR has concluded such international treaties with Germany, the Czech Republic, Hungary, Poland, the Russian Federation and Ukraine. Treaties on the exchange of visiting fellows have been signed with Switzerland, Luxembourg and Finland.<sup>21</sup>

According to the data from National Labour Office, at the end of 2002, 2694 foreigners with work permit were employed in the SR (without the CR) and 2023 citizens of the CR (who did not need the work permit), thus, 4717 foreigners in total. For foreigners it is still the region of Bratislava, which is for them the most interesting one, in which almost 2776 foreign workers were employed (including 1562 people from the CR), i.e. even 60 % from the total of foreign workers in the SR. The numbers of foreigners working in the SR have been recently stabilised and oscillate around the level between 4,4-4,7 thousand people.

From the total number of 4717 foreigners with the work permit at the end of 2002, there were 355 citizens from Germany, 297 citizens from Ukraine, 272 citizens from the USA and 181 citizens from the Great Britain.

The numbers of citizens from Austria, Poland, Russia and France working in the SR oscillated around the level of 115 –120 people. From the neighbouring countries, the lowest interest in the employment in Slovakia is to be recorded in case of citizens from Hungary. For example, in 2001 only 63 citizens from Hungary possessed the labour permit and in 2002, their number was only 87. From the advanced countries of Europe and the USA, mainly the lectors and top managers are employed in the FDI enterprises; from Ukraine mainly the construction workers and workers in the textile and foot-ware firms are in question. The decision of foreigners to make business in the SR is influenced also by political and macroeconomic conditions and the decision to work in the SR is influenced to a great extent by a high unemployment rate.

The number of foreigners at the labour market in the SR is relatively low as compared to some other countries under transformation. The foreigners represent 0,18-0,22 % from the labour force in the SR and their impact on the extent of the supply of labour force in the SR is not significant. At the date of accession of the SR into the EU, the SR is ready to guarantee to the EU nationals and to members of their families a free move for the purposes of labour in

<sup>20</sup> *Illegal migration* in the SR covers the illegal admission of foreigner into the territory of the SR and the illegal leave of the SR by its citizen or foreigner. In principle it is the break in the regime of the state borders of the SR. However, there are cases, in which the foreigner enters the territory of the SR legally but he/she remains in the territory of the SR also after the expiration of the period for which his stay has been permitted. Thus, he/she remains in the territory illegally – this type of migration is considered as an illegal migration due to the breach of the regime of stay.

<sup>21</sup> Currently the Slovak legislation in this area is partially harmonised with the legislation of the EU. According to the Act No. 378/1996 Coll. on employment the foreign citizens and their families are treated in the same way as the citizens of the SR, provided that they possess the work permit or the temporary stay permit in the territory of the SR. The citizens of the Czech Republic are not obliged to have the work permit. As it has already been mentioned, the Act No. 48/2002 Coll. on the stay of foreigners means for the EU citizens a facilitation of the admission to the SR and of their stay in the SR. The citizens of the EU, who perform business activities in the territory of the SR, do not need a residence permit, the registration is sufficient for them. The same is true for their key employees as well as for family members. Simultaneously, the Law anchors the equal status for the EU citizens employed in the SR according to the rules of law of the SR on employment.

the territory of the SR, as well as the possibility to stay in this territory under certain circumstances after the termination of their employment.

Since the inception of the SR, the migration from the SR has most neatly character of the *labour migration*. Currently, at the annual average, it moves around the level of 75 thousand people who are employed mainly for a short-term time period. According to the data of the National Labour Office, at the end of 2001, 76,5 thousand citizens of the SR worked abroad; in the half of 2002, their number was 74,4 thousand people.

According to the records of the Labour Offices of the CR, the number of Slovak citizens working in the CR is varying. In 1993, 23,3 thousand Slovak citizens were working in the CR. Until 1996 this number had tripled and reached almost 72,2 thousand people. Until 1999 it had fallen down to the level of 53,2 thousand people, but in 2001 it increased again and moved at the level of approximately 63,5 thousand people. At the end of 2002 the employers reported 56,6 thousand Slovak citizens working in the CR. At the same time, the CR is the country, where according to the estimates the majority of Slovak citizens work illegally.<sup>22</sup>

A relatively high number of Slovak citizens are employed also in Germany.<sup>23</sup> In 2001, 6,8 thousand Slovak nationals were working in Germany at the average; in addition, there were around 1500 employees of the Slovak firms who carried out service activities based on trade contracts.

The departure of Slovak citizens to Austria has its specific features. The daily or weekly commuting is prevailingly in question. The SR does not have with Austria an agreement on the mutual employment of their citizens. By the OECD data, during 1996-1999 4 thousand people were working in Austria at the annual average, in 2001 it was 3,5 thousand at the annual average.

The employment of the Slovak nationals in Hungary is very low and is oscillating within the interval of 0,4 – 1,1 thousand people annually (OECD data), and, at the same time, is limited by an agreement on the mutual employment at maximum 400 people annually. Another 400 people can work only on the short-term basis for seasonal works. However, in reality this number is exceeded by the citizens of the SR.

People who shuttle, in other words, people who commute to abroad, have a specific position among the people working abroad. They benefit from the different price levels between the country of origin and the country of destination, however, at the expense of transportation and time spent in the transportation means (some of them more than 3 hours daily). According to the census data, 17,7 thousand people of the SR commute daily to abroad.

As it results from the previous analysis, the forms of external migration are different; the same is true in terms of the forms of stay of foreigners in our territory as well as the forms of registration of these foreigners. However, the number of foreigners with the permanent residence permit in the SR (thus counted into the total number of the Slovak population) is, if internationally compared, very low. It is nevertheless certain that we shall encounter all forms of migration to a greater or lower extent also in the future. From the current standpoint it is hard to estimate how the migration situation would develop after the accession of the SR into EU, when the principle of a free move of people would enter into force because currently, on the one hand, the member countries use the restriction mechanisms for the regulation of migration from the non-member countries and, on the other hand, the SR is bound by bilateral agreements with some countries. In the future, the 7-year temporary time period, which has been stated by the EU for the free move of people from candidate countries, will be a noticeable restriction. Certain alleviation is represented by the system 2-3-2, which allows reconsidering the situation after two and five years from the accession to the EU. On the contrary, some EU member countries (e.g. Finland, Norway, Denmark and Ireland) have announced that they will not introduce any temporary time period. However, the experience of Greece, Spain and Portugal showed that after the accession into the EU the number of emigrants from these countries was much lower as it had been originally assumed. In contrast, Slovakia might be a destination country for migrants from less advanced countries.

## Internal migration

**Tab. 6.9: Internal migration of the population**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002*
Number of migrants	113 004	109 956	78 466	80 188	82 513	84 513	78 965	76 898	79 881	89 606
Number of migrants per 1000 population	21,9	20,8	14,6	14,9	15,3	15,7	14,6	14,2	14,8	16,7

\* Preliminary data

<sup>22</sup> The Slovak citizens do not need a working permit at the labour market of the CR, the certification from the employer is sufficient.

<sup>23</sup> The number of migrant workers from the SR is in some countries regulated by interstate agreements. For example in Germany, 3000 people from Slovakia can be employed for seasonal works monthly (provided no domestic workers are available), furthermore, the qualified workers aged 18-40 in the number of 1000 people per one year.



The statistics on internal migration in the SR is based on the change of municipality of the permanent residence<sup>24</sup>. In the first half of nineties the intensity of internal migration was step-by-step decreasing. In the second half of 1990's it moved around the level of 80 thousand migrants per year what, as compared for example to 1985, was only 70% of its level. This situation was reflected also in the intensity of migration. While in 1985 22 people from 1000 Slovak citizens changed their place of permanent residence, in the current time period it was only 14-16 changes per 1000 inhabitants. It was interesting that the intensity of migration was lower despite the fact that especially the beginning of 1990's was marked by an intensive disintegration of municipalities, which acted towards the increase of the migration intensity. The change in the territorial and administrative organisation in 1996 had increased the intensity of migration between districts in the same region, as well as the intensity of migration between regions. It can be confirmed also by the differences in the structure of migration between 1995 and 1996.

**Tab. 6.10: The structure of internal migration**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002
Volume of internal migration in the SR (in thousands)	113,0	109,9	78,4	80,2	82,5	84,8	79,0	76,9	79,9	89,6
of which:										
From region to region (in thousands)	20,1	18,2	14,1	19,1	19,1	19,7	18,2	17,3	18,1	20,3
in %	17,8	16,6	18,0	23,8	23,2	23,2	23,0	22,5	22,7	22,6
From districts to districts within a region (in thousands)	34,6	31,8	22,2	27,1	27,6	27,8	25,1	24,3	25,0	27,5
in %	30,6	28,9	28,3	33,8	33,5	32,8	31,8	31,6	31,3	30,7
From municipality to municipality within a district (in thousands)	58,3	59,9	42,1	34,0	35,8	37,3	35,7	35,2	36,8	41,8
in %	51,6	54,5	53,7	42,4	43,4	44,0	45,2	45,8	46,1	46,7

Since 1996, the development of the total number of migrants within the SR was varying, while the share of migrants from municipality to municipality within the district has been gradually increasing and creates nearly half of the total amount of internal migration in the SR. It means that population despite the high unemployment in some districts does not change the pattern of the migration behaviour being used. The current economic and social differentiation of regions is not a sufficient impulse for people to change their place of permanent residence, especially for longer distances. The links to the environment in which they live, possession of a family house or flat, family relations on the one hand and a nearly non-existing market with dwellings on the other hand – all these aspects represent a stronger background for not changing the permanent residence or moving only to the vicinity. Insufficient demand for work in the place of permanent residence is solved by commuting (daily, weekly or other), often for longer distances. The migration from one district into another within one region represents 31-33% of the total migration and migration from one region to another has been stabilised at the level of around 23%.

A remarkable increase of the intensity of migration, by almost 10 thousand people per year, was recorded in 2002. The structure of migration, however, confirms the previous tendencies when the half of the annual increase falls on the migration between municipalities of the same district.

In comparison with the situation in 1980's and at the turning-point of 1990's, when the population was directed mainly from rural areas into the cities, while mainly the small villages were depopulated, currently the situation in migration is completely different. It is documented also by the statistical data on the increase of population from migration by size groups of municipalities. The increases from internal migration in 2002 are concentrated into smaller municipalities and small cities. The villages with less than 5 000 inhabitants gained from migration and, on the contrary, the villages with the number of population above 5000 recorded migration losses. Mainly the migration losses of towns above 20 000 inhabitants noticeably increased. From 138 towns of the SR even 103 towns recorded losses from the internal migration in 2002.

These changes were notably reflected in the hinterland of big cities. The increases from internal (but also from external) migration are recorded by all districts in the hinterland of the city of Bratislava - Senec, Malacky, Pezinok, Galanta and Dunajská Streda. A similar situation is in the hinterland of the city of Košice, where the increase of population from migration is recorded as well. On the contrary, the cities of Bratislava and Košice record losses from migration. This development confirms that the population migrate from cities to the neighbour hinterland in order to solve their unfavourable housing situation in cities or to seek better living conditions in the environment of a higher quality. Among cities which have gained from migration belong also the towns in the hinterland of Bratislava (Stupava, Senec, Svätý Jur, Šamorín, Malacky). De-concentration and sub-urban tendencies are deepening, to which contribute both the non-existing market with dwellings and more higher expenses related to housing in cities.

<sup>24</sup> The statistics of internal migration includes also the migration between the urban parts in the cities of Košice and Bratislava.

The highest migration losses are reported mainly by districts in the north and east part of Slovakia. Lingeringly these districts are considered as emigration places, which neither benefited from migration in 1980's. In 2001 at the level of districts there were 46 emigration places, i.e. nearly 60% of districts reported decreases of population caused by migration.

**Tab. 6.11: Increase (decrease) of population of the SR by internal migration and by size groups of municipalities**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002
SR	-3 177	-2 399	x	x	x	x	x	x	x	x
of which:										
towns	.	13 445	-131	-1 495	-2 741	-7 674	-7 082	-6 713	-7 189	-9 080
other municipalities	.	-15 844	131	1 495	2 741	7 674	7 082	6 713	7 189	9 080
of which by number of inhabitants:										
-199	x	x	x	-232	-327	189	-101	-106	-140	46
200-499	x	x	x	-7	28	839	1 128	1 121	741	966
500-999	x	x	x	454	665	1 957	1 960	1 530	2 123	2 159
1000-1999*	-22 656	-13 476	-326	586	1 368	2 632	2 170	2 371	2 647	3 310
2000-4999	-8 660	-2 864	239	809	1 175	2 092	1 966	1 973	1 683	2 382
5000-9999	830	287	77	-45	161	-325	-307	-694	-521	-338
10000-19999	4 467	1 612	-143	-318	-104	-507	-765	-849	-1 532	-1 188
20000-49999	9 333	6 098	-726	-474	-734	-2 521	-2 640	-2 520	-2 450	-2 731
50000-99999	6 300	2 164	-24	-773	-1 265	-2 069	-1 930	-1 982	-1 875	-3 089
100000+	7 209	3 780	903	0	-967	-2 287	-1 481	-844	-676	-1517

\*In 1985-1995 municipalities with inhabitants less than 2000 included.

Remark: In 1985-1990 migration between the SR and the CR included.

**Tab. 6.12: Increase (decrease) of population by internal migration in the districts of the SR**

	Net migration							Crude rate of net migration						
	1996	1997	1998	1999	2000	2001	1996-2001	1996	1997	1998	1999	2000	2001	1996-2001
Districts with the largest relative internal migration increase														
Senec	98	165	260	254	552	523	1 852	1,95	3,28	5,15	5,02	10,82	10,08	6,08
Malacky	232	364	431	276	320	332	1 955	3,69	5,77	6,78	4,33	4,99	5,16	5,12
Pezinok	56	183	217	260	310	348	1 374	1,05	3,42	4,04	4,82	5,72	6,42	4,26
Košice-okolie	489	316	498	271	292	406	2 272	4,79	3,07	4,80	2,60	2,78	3,79	3,63
Galanta	191	398	325	241	308	163	1 626	2,03	4,23	3,44	2,54	3,25	1,72	2,87
Banská Štiavnica	-23	96	96	45	13	23	250	-1,35	5,65	5,67	2,64	0,76	1,34	2,45
Turčianske Teplice	-2	-19	89	132	-6	47	241	-0,12	-1,13	5,32	7,86	-0,36	2,79	2,39
Dunajská Streda	121	244	355	247	162	280	1 409	1,09	2,19	3,17	2,20	1,44	2,49	2,10
Zvolen	85	84	261	-1	148	212	789	1,25	1,24	3,83	-0,01	2,17	3,13	1,93
Skalica	151	58	86	57	37	78	467	3,23	1,24	1,82	1,21	0,78	1,67	1,66
Districts with the largest relative internal migration decrease														
Medzilaborce	-71	-20	-1	-38	-74	-5	-209	-5,50	-1,56	-0,08	-2,98	-5,84	-0,40	-2,73
Gelnica	-193	-5	-41	-42	-86	-96	-463	-6,44	-0,17	-1,36	-1,39	-2,83	-3,11	-2,55
Svidník	-102	-66	-50	-46	-66	-120	-450	-3,07	-1,98	-1,50	-1,38	-1,97	-3,58	-2,25
Tvrdošín	-93	-60	-71	-102	-68	-53	-447	-2,73	-1,75	-2,06	-2,94	-1,95	-1,51	-2,16
Humenné	-77	-91	-232	-141	-164	-119	-824	-1,18	-1,40	-3,56	-2,16	-2,52	-1,84	-2,11
Košice	-207	-298	-969	-647	-262	-431	-2 814	-0,86	-1,23	-4,00	-2,68	-1,08	-1,83	-1,95
Stará Ľubovňa	-32	-81	-47	-57	-173	-125	-515	-0,65	-1,63	-0,94	-1,14	-3,42	-2,46	-1,71
Sabinov	-104	-47	-92	-83	-78	-116	-520	-2,00	-0,90	-1,74	-1,56	-1,46	-2,14	-1,64
Námestovo	-103	-56	-79	-32	-105	-124	-499	-1,93	-1,04	-1,45	-0,58	-1,89	-2,21	-1,52
Detva	-83	-52	-2	-33	-72	-29	-271	-2,44	-1,53	-0,06	-0,98	-2,14	-0,87	-1,34
Brezno	-154	-75	-37	-69	-28	-145	-508	-2,33	-1,14	-0,56	-1,05	-0,43	-2,20	-1,28
Bratislava	207	-669	-1 318	-834	-582	-245	-3 441	0,46	-1,48	-2,93	-1,86	-1,30	-0,57	-1,28

In general we can say that mainly young people migrate, especially families with children, what can be documented also by the age structure of the migrants. The highest share of migrants is in case of both men and women in the group aged 25-29, in case of men it is followed by a groups of men aged 30-34 and 20-24; in case of women the order of these two groups has been exchanged. The fourth most numerous group is the group of children aged 0-4. The population at productive age represents almost 70% from all migrants, in case of women it is approximately 67%. The housing and the follow-up of a family member (approximately 60%) are reported as the main reasons for migration. The labour migration was the reason only for 4% people at the nation-wide level, at the level of districts only for 3%.

The labour is however the most frequent reason for migration at the level of regions (nearly 10%). Nevertheless, at the level of regions the permanent increases from the internal migration are reported only by the regions of Trnava and Nitra and, except for the years 1998 and 1999, also by the region of Bratislava. Other regions reported migration losses. It seems that the situation in the internal migration has profiled in terms of migration between regions, i.e. the immigration and emigration places are relatively stable. The relative increases or decreases from migration are, however, low and in 2001, except for the regions of Bratislava and Trnava, they did not reach 1‰, (i.e. even less than 1 person per 1000 inhabitants).

**Tab. 6.13: Migration between regions of the SR (without external migration)**

	BL	TA	TC	NI	ZI	BC	PV	KI
1996								
Immigrants	3 624	2 767	2 001	2 772	1 725	2 107	1 867	2 226
Emigrants	3 031	2 354	2 194	2 445	2 068	2 175	2 488	2 334
Net migration	593	413	-193	327	-343	-68	-621	-108
Net migration per 1000 population	0,96	0,75	-0,32	0,46	-0,50	-0,10	-0,81	-0,14
2000								
Immigrants	3 450	2 656	1 668	2 513	1 444	1 957	1 609	2 037
Emigrants	2 850	2 092	1 949	2 161	1 788	2 012	2 482	2 000
Net migration	600	564	-281	352	-344	-55	-873	37
Net migration per 1000 population	0,97	1,02	-0,46	0,49	-0,50	-0,08	-1,11	0,05
2001								
Immigrants	3 878	2 842	1 716	2 588	1 403	1 967	1 708	2 027
Emigrants	2 920	2 209	2 127	2 249	1 855	2 073	2 481	2 215
Net migration	958	633	-411	339	-452	-106	-773	-188
Net migration per 1000 population	1,60	1,15	-0,68	0,48	-0,65	-0,16	-0,98	-0,25



## 7. Increase and the number of population

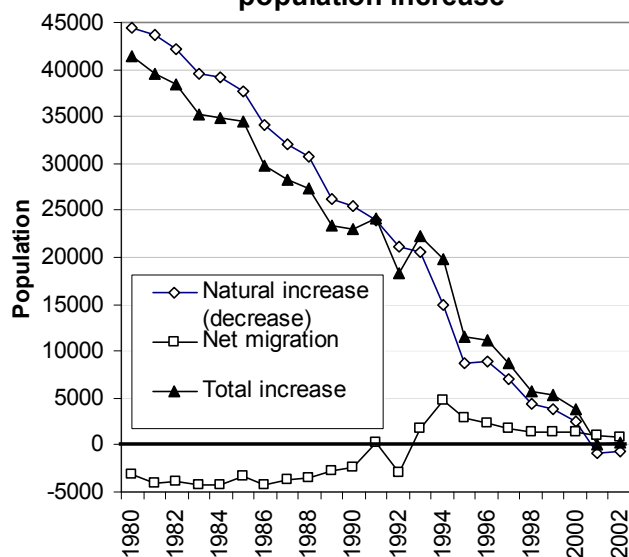
**Tab. 7.1: Increase of population**

		1985	1990	1995	1996	1997	1998	1999	2000	2001	2002
Natural increase	Total	37 691	25 370	8 741	8 887	6 987	4 426	3 821	2 427	-844	-691
	Males	17 576	10 867	3 287	3 510	2 580	913	608	67	-1 266	-1 400
	Females	20 115	14 503	5 454	5 377	4 407	3 513	3 213	2 360	422	709
Net migration	Total	-3 292	-2 322	2 842	2 255	1 731	1 306	1 454	1 463	1 012	901
	Males	-1 831	-1 449	1 524	1 212	991	774	826	868	675	785
	Females	-1 461	-873	1 318	1 043	740	532	628	595	337	116
Total increase	Total	34 399	23 048	11 583	11 142	8 718	5 732	5 275	3 890	168	210
	Males	15 745	9 418	4 811	4 722	3 571	1 687	1 434	935	-591	-615
	Females	18 654	13 630	6 772	6 420	5 147	4 045	3 841	2 955	759	825
Natural increase per 1000 population	Total	7,30	4,79	1,63	1,65	1,30	0,82	0,71	0,45	-0,16	-0,13*
	Males	6,94	4,19	1,26	1,34	0,98	0,35	0,23	0,03	-0,48	-0,54*
	Females	7,65	5,36	1,98	1,95	1,60	1,27	1,16	0,85	0,15	0,26*
Net migration per 1000 population	Total	-0,64	-0,44	0,53	0,42	0,32	0,24	0,27	0,27	0,19	0,17*
	Males	-0,72	-0,56	0,58	0,46	0,38	0,30	0,31	0,33	0,26	0,30*
	Females	-0,56	-0,32	0,48	0,38	0,27	0,19	0,23	0,21	0,12	0,04*
Total migration per 1000 population	Total	6,66	4,35	2,16	2,07	1,62	1,06	0,98	0,72	0,03	0,04*
	Males	6,22	3,64	1,84	1,80	1,36	0,64	0,55	0,36	-0,23	-0,24*
	Females	7,09	5,03	2,46	2,33	1,86	1,46	1,39	1,06	0,27	0,30*

\* Preliminary data

The changes in the number of population in the particular territory are directly influenced by the development of natality, mortality and migration. The long-term growth of the number of population in the SR started to slow down already in eighties of the 20<sup>th</sup> century and this tendency is currently deepening even more. Mainly the development of natality, which at the end of eighties had reached in terms of its crude rate approximately 15‰, contributed to the fall of the natural population increase under the conditions of a stagnated mortality (about 10‰). Due to the mentioned development the natural increase was until 1989 falling, the crude rate of natural increase fell to the level of 5‰. The shortage of population by external migration reached before 1990 160 people annually at the average. The disposals were high also due to the migration to the Czech Republic, 3,5 thousand people annually at the average (in those times the internal migration was in question). The total increase of population fell from 44,5 thousand people in 1980 down to 23,4 thousand people in 1989, what meant in terms of the crude rate a decrease from 7,9‰ down to 4,4‰.

**Graph 7.1: Development of the population increase**



At the turning point of eighties and nineties a break point in the development of demographic characteristics occurred. The number of births was rapidly decreasing and the net reproductive rate fell below the replacement level. Given the number of deaths closely above the level of 50 thousand people per year, the natural increase of population sharply increased. In 2000 it did not reach even one tenth from the value of 1990. The year 2001 was historically the first year when in Slovakia the natural decrease of population occurred. The natural decrease of population retained also in 2002.

According to the official statistical data the SR since its inception has recorded gains from migration. The migration losses were reported only at the beginning of nineties, from the migration with the CR, mainly at the split of the common state. In case of the fall of the natural increase, the share of the net migration in the total growth increased. While in 1995 the migration increase had reached only 32% from the value of the natural increase and represented roughly only one fourth of the total increase, in 2001 and 2002

the migration increase was higher than the natural increase, thanks to which the total increase of population in the SR was retained. The values of increases and their changes are however currently low, so, we can speak about the stagnation of population increases at the levels closely to zero. We suppose that this situation will retain for several years.

**Tab. 7.2: Number of population**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002*
Number of population (31.12.)										
Total	5 178 967	5 310 711	5 367 790	5 378 932	5 387 650	5 393 382	5 398 657	5 402 547	5 378 951	5 379 161
Males	2 539 291	2 595 913	2 613 712	2 618 434	2 622 005	2 623 692	2 625 126	2 626 061	2 611 921	2 611 306
Females	2 639 676	2 714 798	2 754 078	2 760 498	2 765 645	2 769 690	2 773 531	2 776 486	2 767 030	2 767 855
Number of population (1.7.)										
Total	5 161 789	5 297 774	5 363 676	5 373 793	5 383 233	5 390 866	5 395 324	5 400 679	5 379 780	5 378 595
Males	2 531 431	2 590 571	2 612 229	2 616 334	2 620 329	2 623 086	2 624 080	2 625 691	2 612 684	2 611 362
Females	2 630 358	2 707 203	2 751 447	2 757 459	2 762 904	2 767 780	2 771 244	2 774 988	2 767 096	2 767 233

\* Preliminary data

As of 31 December 2002 the number of population of the SR increased up to 5379,2 thousand. Thus, during 10 years from the inception of the SR, the increase by 65 thousand people took place, what was 6,5 thousand people yearly at the average. Despite the fact that the total increase of population had never been negative until now, the number of population in 2001 decreased by 23,6 thousand people as compared to 2000. The actual decrease of the number of population was not in question, but it was the consequence of the recalculation to the results of the 2001 census<sup>25</sup>, which, however, did not influence the development of the number of population for the last decade<sup>26</sup>.

Thus, a better picture on the development of the number of population result is from the comparison of data from the censuses of 1991 and 2001. Based on these data, during the time period between the mentioned censuses the number of population of the SR increased by 105,1 thousand people, what represented an average annual increase by 10,5 thousand people.<sup>27</sup>

**Tab. 7.3: Number of population according to the census**

		1991	2001
Number of population	Total	5 274 335	5 379 455
	Males	2 574 061	2 612 515
	Females	2 700 274	2 766 940
Population increase	Total	105 120	
	Males	38 454	
	Females	66 666	
Mean yearly population increase	Total	10 512	
	Males	3 845	
	Females	6 667	

<sup>25</sup> A similar situation occurred also in the years of previous censuses. Data on the number of population from census and from demographic statistics differ in terms of methodology, thus they cannot be directly compared. Demographic statistics acquires the data on the number of population by balance, i.e. to the number of population in the previous period the births are added, deaths subtracted and the migration balance is added. In census, the number of population is achieved by self-counting. In balance the demographic events, which evade from the statistical records, are not taken into account (in Slovakia the part of emigrants to abroad is in question). The census does not capture people who did not participate in the census.

<sup>26</sup> The recalculation of data from statistics on demography to the results of census causes a break in the development of number of population (due to the differences between the number of population from the balance and the number of population inquired within the census).

<sup>27</sup> The difference against the value obtained from demography (approximately 4 thousand people) is caused mainly by the already mentioned non-registered emigration, i.e. Slovak citizens not booked out from the permanent residence in case of external migration. Part of the difference results also from the fact that we are comparing not exactly the same time periods (1992-2001 or 1993-2002), while the increase of population in 1992 was essentially higher than in 2002.

The differences between cities and other municipalities exist also in terms of growths of population. The natural increase in cities is currently positive; in the country it is negative. The migration balance is developing in a opposite way. The natural increase is to a great extent influenced by the age structure of population. A relatively younger population lives in the cities with a relatively strong productive population and less numerous post-productive population. It is the background for a higher number of births and a lower number of deaths, i.e. for higher natural increase. In contrast, thanks to the changed migration trends the position of hinterland of bigger cities is reinforced, due to which the population as the result of migration is increasing in rural areas and decreasing in cities. Currently, at this level the natural increase achieves low values and the migration balance has a decisive impact on the level of the total increase. In 2002, the number of population decreased in cities by more than 5 thousand people, on the contrary, in the country it increased by nearly the same number. In other words in cities per each 1000 inhabitants a shortage of 1,7 persons was recorded and in rural municipalities the increase by 2,3 persons.

**Tab. 7.4: Increase and the number of population in the regions of the SR in 2001**

	Towns	Rural	Regions							
			BL	TA	TC	NI	ZI	BC	PV	KI
Natural increase	1 493	-2 337	-939	-848	-655	-2 198	631	-1 230	3 067	1 328
Net migration	-6 730	7 742	1 200	765	-392	456	-336	33	-626	-88
Total increase	-5 237	5 405	261	-83	-1 047	-1 742	295	-1 197	2 441	1 240
Natural increase per 1000 population	0,49	-0,99	-1,57	-1,54	-1,08	-3,08	0,91	-1,86	3,88	1,73
Net migration per 1000 population	-2,23	3,28	2,00	1,39	-0,65	0,64	-0,49	0,05	-0,79	-0,11
Total increase per 1000 population	-1,74	2,29	0,44	-0,15	-1,73	-2,44	0,43	-1,81	3,09	1,62
Number of population (31.12.)	3 014 724	2 364 227	599 042	550 918	604 917	712 312	692 434	661 343	791 335	766 650
Number of population (1.7.)	3 017 527	2 362 253	599 053	550 982	605 503	713 237	692 343	662 128	790 321	766 213

The decreasing trend of population growths continued in particular regions of the SR also in 2001; however at the regional level this process appeared less significantly. In all regions the natural increase of population diminished. The natural increase was retained only in the regions of Prešov, Košice and Žilina, in other regions the natural decrease was recorded. The three mentioned regions in the north and east of Slovakia reported also the total increase as a positive one, despite migration shortages in each of them. The fourth region with the positive total population increase was the region of Bratislava, in which the natural decrease was compensated by a relatively high migration increase. In the remaining four regions – Trnava, Trenčín, Nitra and Banská Bystrica, in 2001 the total number of population decreased. The highest growths were recorded in the region of Prešov, the highest shortages in the region of Nitra. Only the region of Trenčín recorded a shortage of population by both the natural change and migration.

It is obvious, that the breakdown of the Slovak Republic into a relatively dynamic and progressive north and east and a static or regressive south and west is still retained. This breakdown is visible also from the level of increases or decreases of population. It seems that for the development of both, the increase and number of population at the level of regions, the development of natality is decisive (except for the region of Bratislava where the migration has a decisive impact).



## 8. Age structure of population

**Tab. 8.1: Basic characteristics of the age structure of population (on 31 December)**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002*
Total										
Number of population	5 178 967	5 310 711	5 367 790	5 378 932	5 387 650	5 393 382	5 398 657	5 402 547	5 378 951	5 379 161
Age group 0-14	1 368 395	1 330 509	1 195 288	1 164 897	1 133 678	1 101 841	1 069 375	1 036 426	1 006 970	968 572
Age group 15-44	2 289 004	2 418 027	2 507 086	2 512 298	2 515 357	2 517 958	2 519 513	2 519 047	2 504 417	2 493 619
Age group 45-64	1 030 818	1 010 780	1 077 971	1 105 051	1 133 271	1 163 253	1 194 594	1 227 504	1 254 879	1 293 409
Age group 65+	490 750	551 395	587 445	596 686	605 344	610 330	615 175	619 570	612 685	623 561
Age group 0-14 (%)	26,42	25,05	22,27	21,66	21,04	20,43	19,81	19,18	18,72	18,01
Age group 15-44 (%)	44,20	45,53	46,71	46,71	46,69	46,69	46,67	46,63	46,56	46,36
Age group 45-64 (%)	19,90	19,03	20,08	20,54	21,03	21,57	22,13	22,72	23,33	24,04
Age group 65+ (%)	9,48	10,38	10,94	11,09	11,24	11,32	11,39	11,47	11,39	11,59
Mean age	32,92	33,56	34,53	34,81	35,09	35,38	35,67	35,97	36,16	36,63
Ageing index	35,86	41,44	49,15	51,22	53,40	55,39	57,53	59,78	60,84	64,38
Males										
Number of population	2 539 291	2 595 913	2 613 712	2 618 434	2 622 005	2 623 692	2 625 126	2 626 061	2 611 921	2 611 306
Age group 0-14	698 351	679 503	610 853	595 837	579 568	563 558	546 979	530 207	515 164	495 908
Age group 15-44	1 158 213	1 225 979	1 269 534	1 272 407	1 274 152	1 275 927	1 276 849	1 277 209	1 269 088	1 263 805
Age group 45-64	483 245	470 817	505 395	519 577	534 363	550 185	566 265	582 897	596 237	616 245
Age group 65+	199 482	219 614	227 930	230 613	233 922	234 022	235 033	235 748	231 432	235 348
Age group 0-14 (%)	27,50	26,18	23,37	22,76	22,10	21,48	20,84	20,19	19,72	18,99
Age group 15-44 (%)	45,61	47,23	48,57	48,59	48,59	48,63	48,64	48,64	48,59	48,40
Age group 45-64 (%)	19,03	18,14	19,34	19,84	20,38	20,97	21,57	22,20	22,83	23,60
Age group 65+ (%)	7,86	8,46	8,72	8,81	8,92	8,92	8,95	8,98	8,86	9,01
Mean age	31,61	32,14	33,01	33,27	33,56	33,81	34,10	34,39	34,56	35,02
Ageing index	28,56	32,32	37,31	38,70	40,36	41,53	42,97	44,46	44,92	47,46
Females										
Number of population	2 639 676	2 714 798	2 754 078	2 760 498	2 765 645	2 769 690	2 773 531	2 776 486	2 767 030	2 767 855
Age group 0-14	670 044	651 006	584 435	569 060	554 110	538 283	522 396	506 219	491 806	472 664
Age group 15-44	1 130 791	1 192 048	1 237 552	1 239 891	1 241 205	1 242 031	1 242 664	1 241 838	1 235 329	1 229 814
Age group 45-64	547 573	539 963	572 576	585 474	598 908	613 068	628 329	644 607	658 642	677 164
Age group 65+	291 268	331 781	359 515	366 073	371 422	376 308	380 142	383 822	381 253	388 213
Age group 0-14 (%)	25,38	23,98	21,22	20,61	20,04	19,43	18,84	18,23	17,77	17,08
Age group 15-44 (%)	42,84	43,91	44,94	44,92	44,88	44,84	44,80	44,73	44,64	44,43
Age group 45-64 (%)	20,74	19,89	20,79	21,21	21,66	22,13	22,65	23,22	23,80	24,47
Age group 65+ (%)	11,03	12,22	13,05	13,26	13,43	13,59	13,71	13,82	13,78	14,03
Mean age	34,18	34,91	35,98	36,27	36,55	36,86	37,16	37,47	37,65	38,15
Ageing index	43,47	50,96	61,51	64,33	67,03	69,91	72,77	75,82	77,52	82,13

\* Preliminary data

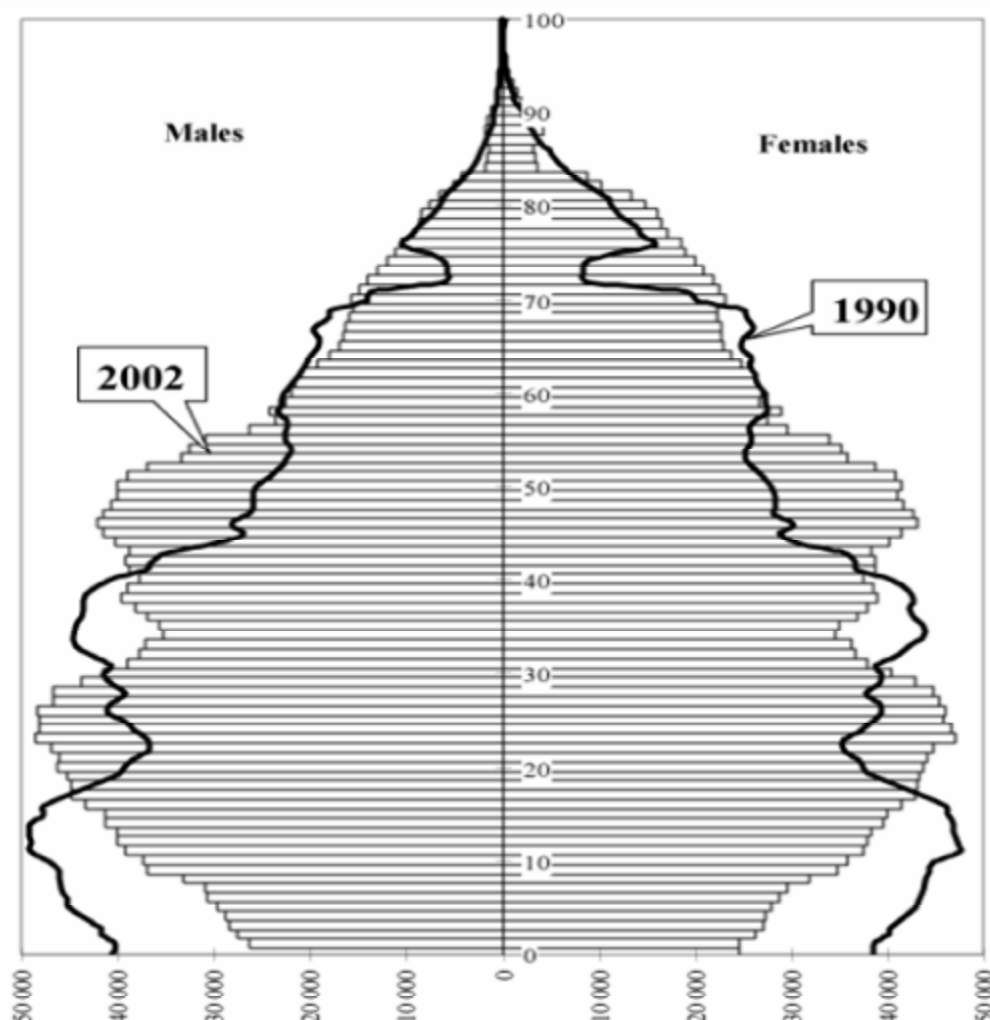
In demographically advanced countries the changes in the structure of population are the factors which significantly influence the functioning of the society. Mainly the structure of population by sex, age and family status are in question. Structural changes, with regard to their significance, unambiguously overcome the changes in the number of population, while mainly the changes in the age structure belong among the most important problems, which the advanced countries have currently to cope with.

The age structure of each population is the direct result of the impact of natality, mortality and migration roughly for the last hundred years. As the actual age structure of population is influenced by the age structure from the past, also the future age structure will to depend on the current one with a great extent.

The age structure of Slovak population can be characterised as an uneven and ageing. At the relatively stable mortality level and insignificant external migration, it is mainly the development of natality, which influences the age structure of population. When looking at the age pyramid we can say that the periods of higher and lower natality have been regularly changing. Even until nowadays the consequences of the World War I are visible, when the lower numbers of people born in this time period are reflected also in the lower numbers of people living currently in the highest age groups. The absence of generations from the period of an economic crisis in thirties currently appears as the less numerous group of people aged 65-70. Immediately after the World War II, a compensation period started in Slovakia, which was characterised by an increased reproduction of population, which lasted until the half of fifties.

The mentioned increase in natality is observable also in the age structure of population as powerful groups of people aged 45-55. In the current age structure a remarkable increase of the number of population at the age of highest fertility is noticeable, i.e. the people aged 22-30 who were born during the population wave from seventies. In connection with the decrease of natality since eighties, the basis for the age pyramid started to be narrower, what was obviously reflected in the sharp decrease of the population at the youngest age categories. The shape of the entire age pyramid of Slovakia witnesses the regressive type of age structure, in which the children component is relatively less numerous and the population has an insufficient reproduction.

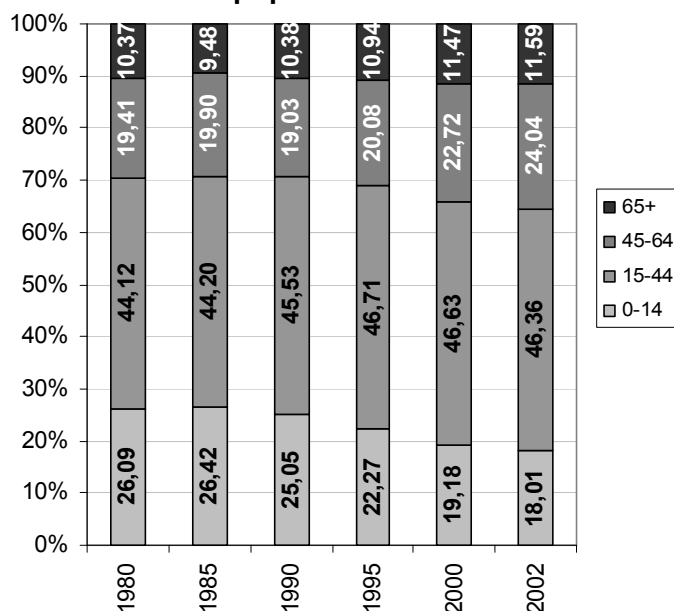
**Graph 8.1: Age structure of population of the SR in 1990 and 2002**



Comparison of age pyramids for 1990 and 2002 mirrors the entire fall of natality since the beginning of nineties until now, which is shown as a noticeable decrease of population at the youngest age categories. The inequalities in the age structure are reproduced further and in the very next future they will contribute (together with the expected development of mortality) to the significant acceleration of ageing. The less numerous generations born during the World War I are stepwise dying out and in the very close future will be replaced in the post-productive age by numerous generations born after the World War II, which are step-by-step moving from the productive age into the post-productive age. On the contrary, the less numerous generations born after 1990 are approaching the productive age. They will, at the same time, replace at the age of highest fertility the powerful age groups born in seventies, who will leave the reproductive age. It means that in the forthcoming time period the decrease of number of population will touch the productive as well as pre-productive component of population. The next development of population in the pre-productive age will depend also on the development of fertility, however, due to the existing age structure it is not possible to reckon with the increase of the number of births in the closest time period, even in the case of an increasing level of fertility. The number of population at the post-productive age will certainly increase by a faster rate as it was the case until now.

## Main age groups

**Graph 8.2: Main age groups of population**



Main age groups are determined with regard to the process of demographic reproduction<sup>28</sup>. They are marked not only by the different number but also by differences in the nature of changes, which occurred during the last years. During the recent time period, the changes at the level of main age groups are more visible, what confirms the speeding up of the process of ageing. The share of children aged until 15 years in the population lingeringly exceeded 25%, even in 1990 this group of population represented exactly the one fourth of population. In 1999 its share got below the level of 20% and in 2002 it reached lowest value of 18% the until now (during 17 years a decrease by more than 8 percentage points or 31,5%). All three other main groups recorded, as compared to 1990, an increase of their share, although both the reproductive and older post-reproductive population groups increased their share in population only minimally. The share of population aged 45-64 increased during the recent time period to the greatest extent (increase by 26%). Population

aged 15-44, the representation of which is however declining since 1998 (a fall by 0,7% or 24,4 thousand people during 1998-2002), is to be lingeringly considered as the most numerous group. Thus, currently only the share of the post-reproductive population groups is increasing. Changes, which are taking place in the age structure of the population of the SR and which can be observed also at the level of main age groups, are marked as population ageing. It appears by the increasing of the mean age of population as well as by the increase of values of ageing indicators.

## Children component of population

**Tab. 8.2: Age structure of population aged until 15 years**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002*
Number										
Total	1 368 395	1 330 509	1 195 288	1 164 897	1 133 678	1 101 841	1 069 375	1 036 426	1 006 970	968 572
0	88 767	79 103	60 843	59 594	58 609	57 157	55 831	54 741	50 861	50 519
1-4	359 786	328 214	289 226	272 537	258 229	244 356	235 808	230 835	223 787	216 388
5-9	477 695	446 486	401 231	394 369	386 592	378 337	366 407	349 770	332 869	314 351
10-14	442 147	476 706	443 988	438 397	430 248	421 991	411 329	401 080	399 453	387 314
Share on the total population (%)										
Total	26,42	25,05	22,27	21,66	21,04	20,43	19,81	19,18	18,72	18,01
0	1,71	1,49	1,13	1,11	1,09	1,06	1,03	1,01	0,95	0,94
1-4	6,95	6,18	5,39	5,07	4,79	4,53	4,37	4,27	4,16	4,02
5-9	9,22	8,41	7,47	7,33	7,18	7,01	6,79	6,47	6,19	5,84
10-14	8,54	8,98	8,27	8,15	7,99	7,82	7,62	7,42	7,43	7,20

\* Preliminary data

Due to the long-term decrease in natality, both the absolute number and the relative proportion of children in population are decreasing. In 2002, the share of children until 15 fell down to a historically lowest level of 18,01% and, if expressed absolutely, below the level of 1 million for the first time since 1949 (in the situation of a essentially higher total number of population as compared to the number from the end of forties). In total, the share of population aged 0-14 decreased during 1995-2002 by 226,7 thousand, what means a fall by nearly 20%. These shortages, however, were not even in time, what is related also to the uneven decrease of natality. The mentioned irregularity of

<sup>28</sup> Population at the age of 0-14 years represents a pre-reproductive group, at the age of 15-44 the reproductive, at the age of 45-64 a post-reproductive but productive and at the age of 65 years and over the post-reproductive and post-productive group.

the natality development is reflected also in the uneven intensity of the decrease of the number of particular partial age groups in case of the youngest population. Because the decrease of fertility was the most significant in the first half of nineties, the highest shortages were recorded at the population aged 5-9. During last 7 years (since 1995) the number of children aged 5-9 decreased by more than 86 thousand, what is a fall by 21,6% and the representation of this group of children in population decreased from 7,5% in 1995 down to 5,8% in 2002.

### Population aged 65 and over

**Tab. 8.3: Age structure of population aged 65 and over**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002*
Number										
Total	490 750	551 395	587 445	596 686	605 344	610 330	615 175	619 570	612 685	623 561
65-69	133 699	219 774	209 918	210 018	210 824	208 390	205 300	201 881	195 771	194 409
70-74	150 251	110 652	181 378	179 638	177 306	174 666	174 885	176 285	174 766	178 189
75-79	114 789	111 316	83 384	99 971	116 736	132 065	135 335	137 300	135 360	135 388
80-84	60 974	70 710	68 923	61 734	53 813	45 937	48 492	54 563	64 638	76 375
85+	31 037	38 943	43 842	45 325	46 665	49 272	51 163	49 541	42 150	39 200
Share on the total population (%)										
Total	9,48	10,38	10,94	11,09	11,24	11,32	11,39	11,47	11,39	11,59
65-69	2,58	4,14	3,91	3,90	3,91	3,86	3,80	3,74	3,64	3,61
70-74	2,90	2,08	3,38	3,34	3,29	3,24	3,24	3,26	3,25	3,31
75-79	2,22	2,10	1,55	1,86	2,17	2,45	2,51	2,54	2,52	2,52
80-84	1,18	1,33	1,28	1,15	1,00	0,85	0,90	1,01	1,20	1,42
85+	0,60	0,73	0,82	0,84	0,87	0,91	0,95	0,92	0,78	0,73

\* Preliminary data

The development on the opposite side of the age spectrum is exactly the opposite one as compared to the children component of population. The share of population aged 65 and over reached in 2002 the historical highest level of 11,6%, what means an increase by 6% in comparison with 1995. A more detailed view on particular subgroups is reflected by the population development from the past. As compared to the previous years only the share of people aged 85 and over is more significantly decreasing, because the weak population age groups born during the World War I start to move to this group. On the contrary, higher number of persons born around 1920 causes the increase of the share of group of population aged 80-84. The share of population aged 65-79 is changing only negligibly. A completely different situation will happen if the powerful age groups born after the World War II start moving to this group. Together with the expected further decrease of mortality the position of the age group of population aged 65 and over will be remarkably reinforced.

### Population ageing

**Tab. 8.4: Basic characteristics of population ageing**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002*
Total										
Ageing index	35,86	41,44	49,15	51,22	53,40	55,39	57,53	59,78	60,84	64,38
Age index	108,41	103,56	90,80	87,57	83,84	80,09	76,36	72,40	69,36	64,52
Males										
Ageing index	28,56	32,32	37,31	38,70	40,36	41,53	42,97	44,46	44,92	47,46
Age index	125,13	121,99	108,76	105,11	100,40	95,99	91,44	86,55	82,80	76,79
Females										
Ageing index	43,47	50,96	61,51	64,33	67,03	69,91	72,77	75,82	77,52	82,13
Age index	95,16	89,46	77,43	74,55	71,51	68,25	65,11	61,82	59,27	55,26

\* Preliminary data

During nineties the demographic ageing of the Slovak population deepened. The number of older people in population increased (absolute ageing), as well as their share (relative ageing). The ageing of population was reflected in all indicators, by which it is possible to measure this phenomenon. Population started to age very remarkably mainly from the bottom part of the age pyramid due to still lower numbers of births, but the ageing appeared also from the top of the age pyramid, what is conditioned by the fact that still more people achieve the higher age. The demographic ageing of the Slovak population is documented also by the growth of mean values. The mean age in 2002 reached the level of 36,6 years what is historically the highest value in Slovakia. As compared to 1995, the Slovak population "has become older" by 0,9 years (increase by 6,1%). Even better is the population ageing expressed by the ageing index. Currently more than 64 persons aged 65 and over fall per 100 persons aged until 15 years. Due to the



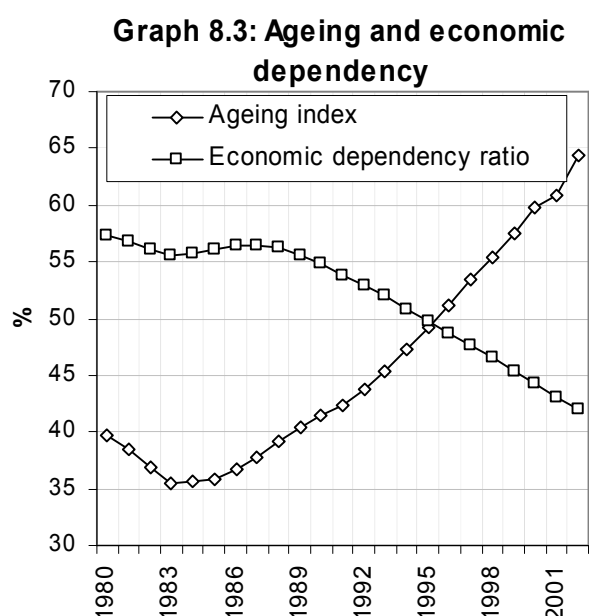
development at youngest and oldest age groups (accumulation of the effect of the low fertility and the prolongation of human life), the increase of ageing index is extremely dynamic. In comparison with 1995, the ageing index increased by 31%, while its annual increases are currently above the level of 5%.

## Economic dependency

**Tab. 8.5: Population by economic groups**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002*
Total										
Total	5 178 967	5 310 711	5 367 790	5 378 932	5 387 650	5 393 382	5 398 657	5 402 547	5 378 951	5 379 161
Pre-productive age	1 368 395	1 330 509	1 195 288	1 164 897	1 133 678	1 101 841	1 069 375	1 036 426	1 006 970	968 572
Productive age	2 930 582	3 058 545	3 230 768	3 266 079	3 299 779	3 332 060	3 361 117	3 389 838	3 397 810	3 410 718
Post-productive age	879 990	921 657	941 734	947 956	954 193	959 481	968 165	976 283	974 171	999 871
Males										
Total	2 539 291	2 595 913	2 613 712	2 618 434	2 622 005	2 623 692	2 625 126	2 626 061	2 611 921	2 611 306
Pre-productive age	698 351	679 503	610 853	595 837	579 568	563 558	546 979	530 207	515 164	495 908
Productive age	1 528 318	1 590 672	1 674 682	1 694 468	1 713 251	1 731 671	1 748 564	1 763 895	1 767 676	1 778 662
Post-productive age	312 622	325 738	328 177	328 129	329 186	328 463	329 583	331 959	329 081	336 736
Females										
Total	2 639 676	2 714 798	2 754 078	2 760 498	2 765 645	2 769 690	2 773 531	2 776 486	2 767 030	2 767 855
Pre-productive age	670 044	651 006	584 435	569 060	554 110	538 283	522 396	506 219	491 806	472 664
Productive age	1 402 264	1 467 873	1 556 086	1 571 611	1 586 528	1 600 389	1 612 553	1 625 943	1 630 134	1 632 056
Post-productive age	567 368	595 919	613 557	619 827	625 007	631 018	638 582	644 324	645 090	663 135
Total (%)										
Pre-productive age	26,42	25,05	22,27	21,66	21,04	20,43	19,81	19,18	18,72	18,01
Productive age	56,59	57,59	60,19	60,72	61,25	61,78	62,26	62,75	63,17	63,41
Post-productive age	16,99	17,35	17,54	17,62	17,71	17,79	17,93	18,07	18,11	18,59
Males (%)										
Pre-productive age	27,50	26,18	23,37	22,76	22,10	21,48	20,84	20,19	19,72	18,99
Productive age	60,19	61,28	64,07	64,71	65,34	66,00	66,61	67,17	67,68	68,11
Post-productive age	12,31	12,55	12,56	12,53	12,55	12,52	12,55	12,64	12,31	12,96
Females (%)										
Pre-productive age	25,38	23,98	21,22	20,61	20,04	19,43	18,84	18,23	17,77	17,08
Productive age	53,12	54,07	56,50	56,93	57,37	57,78	58,14	58,56	58,91	58,96
Post-productive age	21,49	21,95	22,28	22,45	22,60	22,78	23,02	23,21	23,31	23,96

\* Preliminary data



Changes in the age structure of population are reflected also in the economic dependency of population at the productive age caused by a non-productive component of population<sup>29</sup>. The developments of both, the indices of the dependence of old and young people as well as of the economic dependency ratio, are influenced by the decreasing representation of children in population, stagnating representation of people at productive age and the increasing representation of the post-productive component of population. The fall of the economic dependency ratio is slowing down, but the period when this slowdown will cease and starts to grow is still more and more approaching. In 1995 more than 66 economically dependent people fell per 100 inhabitants at the productive age, in 2002, it was only 58 people (a decrease by 12,8%). The annual fall of the economic dependency ratio reaches currently only the value of 1% (in the half of nineties, the average annual fall was more than 2%).

<sup>29</sup> In particular countries the productive, together with the non-productive, component of population is defined in a different way. In Slovakia the definition reflects the former borders of the age at retirement – pre-productive age 0-14, productive age for men 15-59, for women 15-54, post-productive age for men 60 and over, and for women 55 and over.

A remarkable fall of the children component of population is reflected also by the sharp decrease of the dependence of young people (from the level of approximately 37 people at the pre-productive age per 100 people at the productive age in 1995 down to approximately 28 people at the pre-productive age in 2002).

Old age dependency ratio expressing the number of inhabitants at the post-productive age falling per 100 people at productive age had been decreasing until 2001, however, by a slower rate as compared to the young age dependency ratio (for the time period of 1995-2001 a fall by nearly 2%). In 2002 the decrease of this index ceased and its value increased against the situation in 2001. During one year the old age dependency ratio increased by 2,3% and achieved the value from the beginning of nineties (more than 29 inhabitants at the post-productive age fell per 100 inhabitants at the productive age).

**Tab. 8.6: Indicators of the dependency of the productive population caused by the non-productive population**

	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002*
Young age dependency ratio	46,69	43,50	37,00	35,67	34,36	33,07	31,82	30,57	29,64	28,40
Old age dependency ratio	30,03	30,13	29,15	29,02	28,92	28,80	28,80	28,80	28,67	29,32
Economic dependency ratio	76,72	73,64	66,15	64,69	63,27	61,86	60,62	59,37	58,31	57,71

\* Preliminary data

### Age structure of population in regions

**Tab. 8.7: Basic characteristics of the population structure in the regions SR in 2001**

	Towns	Rural	Region							
			BL	TA	TC	NI	ZI	BC	PV	KI
Age group 0-14 (%)	17,81	19,89	15,06	17,48	17,67	17,03	20,12	17,99	22,63	20,21
Age group 15-44 (%)	48,17	44,50	46,43	47,03	46,49	45,92	46,82	46,17	46,91	46,71
Age group 45-64 (%)	24,19	22,23	26,50	24,17	23,90	24,41	22,22	23,88	20,33	22,42
Age group 65+	9,83	13,38	12,01	11,32	11,95	12,63	10,84	11,96	10,13	10,67
Mean age	35,86	36,57	38,07	36,65	36,87	37,49	35,28	36,81	33,85	35,21
Ageing index	55,22	67,26	79,71	64,75	67,63	74,19	53,89	66,48	44,78	52,80

Regional differences in the reproductive behaviour of population, which are described in the previous chapters, are, as a rule, mirrored in the different structure of population in particular regions. Due to the fact that the differences in the demographically behaviour among particular regions of the SR are significant, also the population structure is differentiated noticeably. This is mainly related to the age structure. Great differences in the age structure of population can be observed even at the regional level, differences are also between the situation in cities and in the rural areas.

Population in cities is younger than the population in other municipalities, despite the fact that the more powerfully represented children component of population is in the country (the share of population below 15 years is in country higher by more than 2 percentage points). The decisive impact on the age structure at this level has the more powerfully represented population at the productive age, mainly the group of people aged 15-44. In cities, the population at productive age represents more than 72% from the total number of population, in the county it is only nearly 67% (the difference being 5,6 percentage points).

One has to take into account both, the high number of population of the productive age group as well as the fact that in the rural areas, as compared to cities, not only higher number of children is living but also of the old people. The consequence of the mentioned situation is also the lower mean age in cities as compared to the rural areas (by 0,7 years) and also a lower level of the ageing index (in cities, 55 inhabitants aged 65 and over fall per 100 inhabitants aged less than 15 years, in the county even 67 inhabitants 65 and over). It can be assumed, that the de-concentration migration trends will take place in the very next future towards the equalisation of differences in the age structure of population between the urban and rural areas, because mainly the young population is moving into the hinterland of big cities.

If we monitor the regional differences in the age structure at the regional level of the SR, two distinct types appear remarkably. The first type is represented by the regions with the progressive population age structure – regions of Žilina, Prešov and Košice. In comparison with the Slovak average, these regions can be characterised by a high share of people aged 0-14 (above 20%), and, on the contrary, by the low share of older population (the share of people aged 65 and over does not exceed 11%). The high level of natality in these regions is ensuring the prevalence of young population and the slower population ageing. The slower ageing in comparison with other parts of Slovakia can be documented also by the lowest value of ageing index, which oscillates around the level of 50%.

The second type is represented by regions with the regressive age population structure, i.e. with the high representation of older people and a relatively low share of the children. The population of the following regions can be included here: Nitra, Trenčín, Trnava and Banská Bystrica. The lingeringly lower fertility level in these regions is connected to the faster ageing of population. The share of children component in these regions does not reach the Slovak average, it is moving in between 17%-18%. The share of older population is higher than the average share in Slovakia, while the maximum value is achieved by the region of Nitra having more than 12% of population aged 65 and over (the highest value from all regions).

A specific case is the region of Bratislava, mainly thanks to the capital – Bratislava. The ageing index as well as the mean age in this region are the highest (80% and 38,1 years respectively). This situation is caused mainly by a very low representation of the children component. The majority of population at the older productive age is living here and the share of people aged 65 and over is the second highest, directly behind the region of Nitra.

If we compare the region of Prešov, which has the youngest population and the region of Bratislava having the oldest population, we shall find out, for example, that the difference in the mean age is 4,2 years, the ageing index in the region of Bratislava reaches nearly twofold the value of the region of Prešov and that in the region of Prešov, more than 50% of children aged less than 15 years are living in this region as compared to the region of Bratislava.



## 9. International comparison

Demographic development of each country is to a certain extent a reflection of changes, which are carried out within the framework of its political, economic and social development. In addition, also other factors, mainly the course of reproductive processes in the past, have the impact on the population development.

**Tab.9.1: Overview of demographic indicators in selected countries of the EU in 2000**

	EU 15	Germany	France	Italy	Sweden
Marriages per 1000 population	5,1*	5,1	5,1	4,8*	4,5
Mean age of women at first marriage	28,1*	28,2*	29,1*	27,2*	30,4*
Divorces per 1000 population	1,8*	2,3*	2,0*	0,6	2,4
Total fertility rate	1,48	1,36	1,88	1,24	1,54
Live-births out of wedlock	28,4	23,4	42,6	9,6	55,3
Life expectancy at birth - Males	75,3	74,7*	75,2	76,3	77,4
Life expectancy at birth - Females	81,4	80,7*	82,7	82,4	82,0
Infant mortality rate	4,7	4,4	4,6	4,5	3,4
Natural increase per 1000 population	1,0	-0,8	4,0	-0,3	-0,3
Total increase per 1000 population	4,1	1,2	4,9	2,8	2,4
Population 60+ (%)	21,7	23,0	20,6	23,9	22,1

\* Data for the year 1999

**Tab.9.2: Basic demographic characteristics in Central European countries in 1990 and 2001**

	SR	ČR	Hungary	Poland	Austria	Slovenia
	1990					
Total first marriage rate (women)	0,96	1,02	0,77	0,91	0,58	0,51
Mean age of women at first marriage	21,9	21,6	21,9	22,6	24,9	23,7
Total divorce rate	0,23	0,38	0,27	0,15	0,33	0,14
Total fertility rate	2,09	1,90	1,87	2,05	1,45	1,46
Mean age of women at first childbearing	22,6	22,5	23,1	23,3	25,0	23,7
Births out of wedlock (%)	7,6	8,6	13,1	6,2	23,6	24,5
Life expectancy at birth - Males	66,7	67,6	65,2	66,5	72,3	69,8
Life expectancy at birth - Females	75,6	75,5	73,7	75,5	78,8	77,8
Infant mortality rate	12,0	10,8	14,9	19,3	7,9	8,2
Rate of natural increase (%)	0,48	0,01	-0,19	0,41	0,10	0,19
Rate of net migration (%)	-0,04	0,01	0,18	-0,03	0,93	-0,01
Rate of population increase (%)	0,43	0,02	-0,02	0,38	1,03	0,18
Ageing index (65+/0-14)*	51,2	75,3	80,7	52,4	88,3	73,3
	2001					
Total marriage rate (women)	0,47	0,47	0,44	0,57	0,46	0,43
Mean age of women at first marriage	24,2	24,8	25,1	24,1	27,2	27,0
Total divorce rate	0,28	0,45	0,39	0,18	0,46	0,22
Total fertility rate	1,20	1,14	1,31	1,29	1,31	1,21
Mean age of women at first childbearing	24,3	25,3	25,3	24,8	26,5	26,7
Births out of wedlock (%)	19,8	23,5	30,3	13,1	33,1	39,4
Life expectancy at birth - Males	69,6	72,1	68,1	70,2	75,9	72,4
Life expectancy at birth - Females	77,7	78,6	76,4	78,3	81,7	80,3
Infant mortality rate	6,2	4,0	8,1	7,6	4,8	4,3
Rate of natural increase (%)	-0,02	-0,17	-0,34	0,01	0,01	-0,05
Rate of net migration (%)	0,02	0,20	0,10	-0,04	0,21	0,25
Rate of population increase (%)	0,00	0,03	-0,25	-0,03	0,22	0,20
Ageing index (65+/0-14)*	60,2	87,0	93,5	68,8	94,9	94,1

\* Data for the year 1996

The current demographic situation in Europe is the result of a long-term historical evolution. Europe belongs to those world areas, in which the demographic development has made great progress. Currently, the impacts of the 40-year post-war political division of Europe, which was to a decisive extent the cause for the expansion of the demographic differentiation between the European countries, are fading away. At the end of the 20<sup>th</sup> century the social transformation in the current post-communist countries, which was accompanied by changes in the reproductive behaviour of population, significantly attacked the situation in European population. Although these processes lost their intensity, they caused remarkable changes in the demographic map of Europe.

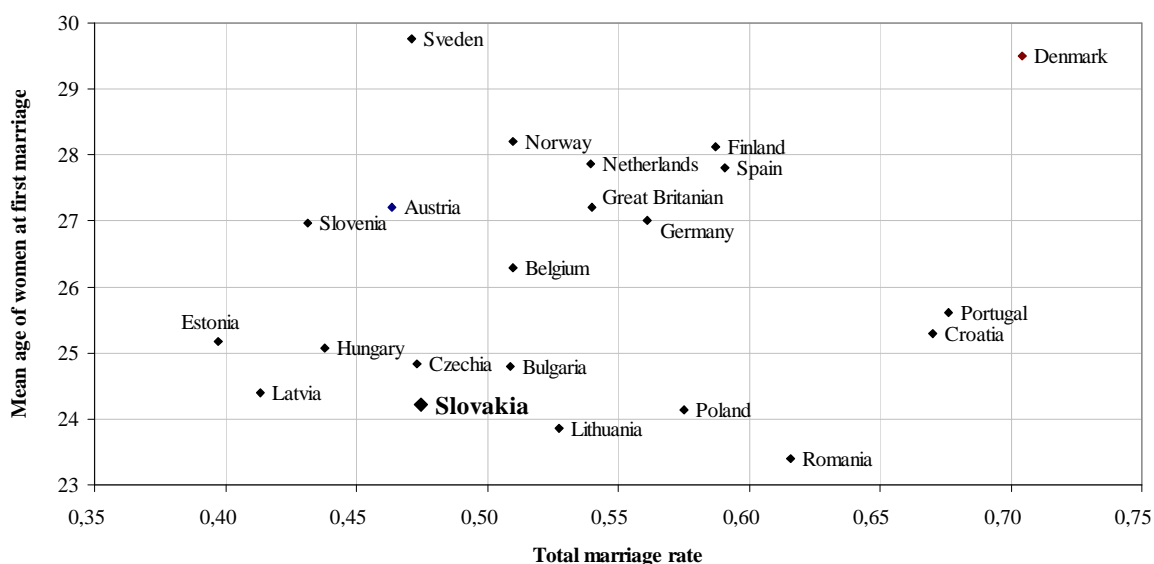
The current time period looks calmer as compared to the period of noticeable changes at the end of 20<sup>th</sup> century. The particular demographic trends are gradually stabilising or in some cases the beginning of compensation effects is visible. More significant changes do not occur even in the ranking of individual countries. A new demographic typology of European countries has step-by-step started to be formed. The impact of the former political arrangement of Europe and still more and more the integration impacts start to appear.

Population development of the Slovak Republic is closely related to the population development of the whole Europe and mainly of the region of Central Europe. The common history, similar political arrangement and the overlapping population space cause that several factors, which influence the demographic development in particular countries, are the same or very similar.

## Nuptiality and divorce

The nuptiality and divorce of population are narrowly related to the national traditions, cultural habits and moral standards. The international comparison of nuptiality and divorce is complicated especially with regard to different legal norms in individual countries. Situation in the demographically advanced countries is, however, not so different, that such comparison cannot be done.

**Graph 9.1: Nuptiality in selected European countries in 2001**



In general we can say that the decrease of nuptiality is ongoing (although by a reduced intensity) and the age at marriage for men and also for women is furthermore increasing. In the majority of countries the level of nuptiality has approached the level, below which it will probably not fall in the very next future. In some countries this level has already been achieved. In Denmark, France and Finland the decrease of nuptiality has been ceased and a consequent moderate increase occurs.

Despite the fact that differences in the nuptiality level between particular countries are not negligible (e.g. the nuptiality in Denmark is by 70% higher than in Estonia), it is not possible to determine several larger groups, which would mutually differ in the level of nuptiality. European countries (except for some countries) represent one large group, in which on one margin the already mentioned Estonia is placed, together with Latvia, Slovenia and Hungary and on the opposite margin Romania, Spain, Poland and Finland are situated. The difference in the level of nuptiality between countries in these two margins reaches roughly 45 - 50 %. Outside of this large group of countries, there are some countries with high nuptiality. Mainly Croatia, Portugal, Macedonia, Albania and Turkey (countries with traditionally high nuptiality) but also Denmark and Iceland belong here, which, on the contrary, in eighties belonged among countries with the lowest nuptiality in Europe. It is worth to mention especially Denmark where the nuptiality has been increasing for 20 years, what is a sporadic case in Europe.

The level of nuptiality in Slovakia is currently noticeably below the European average. In 2001 the same level of nuptiality was in Slovakia as in the Czech Republic and Sweden, while the lower nuptiality than in the case of these three countries was recorded only in four European countries – Austria, Slovenia, Hungary and Latvia.

In terms of the mean age at first marriage (when assessing, only the values for women are taken into account), the differentiation in Europe is more obvious. Two large groups of countries have been formed. In the first one, the countries of Central and Eastern Europe (except for Slovenia) and Portugal are located, in the second one the countries of West and North Europe are to be found.

Also this division documents that the different nuptiality behaviour from the past is still partially persisting. It is mainly related to the different age at marriage because the differences in the level of nuptiality between the former East and West block do not exist anymore. The different timing of marriages, which was in the past connected to the different models of the reproductive behaviour in the politically divided Europe, has, however, still to a great extent persisted.

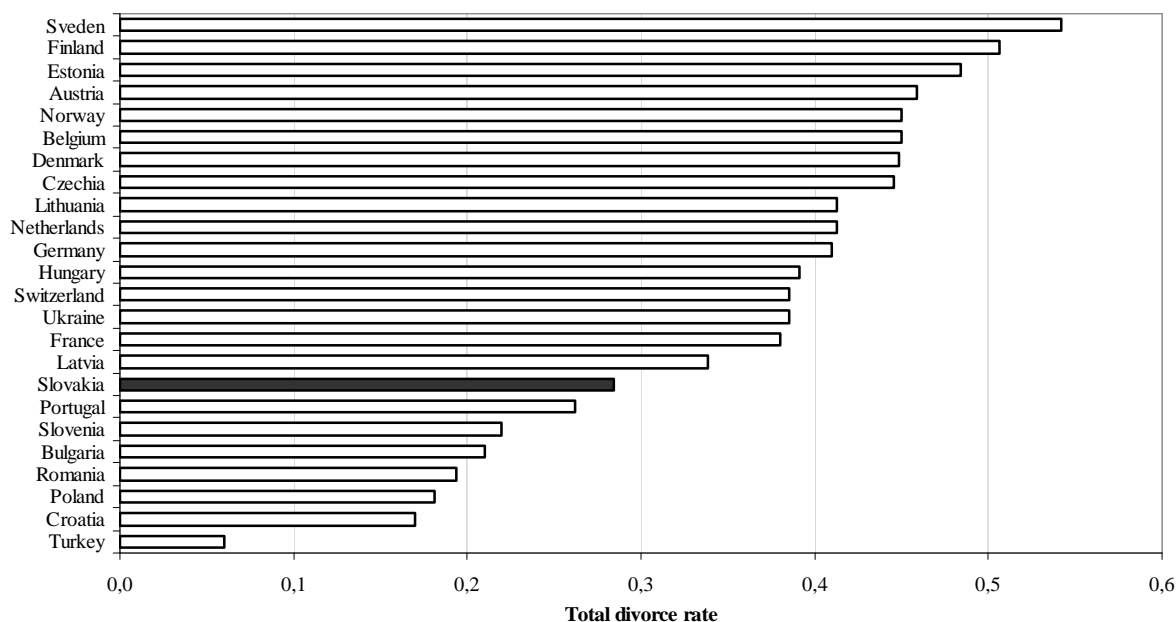
Slovakia still belongs among countries with the lower age of women at marriage in Europe (together with Poland, Lithuania and Latvia). Even lower age of women at marriage is recorded in Romania, Turkey, and Albania and in some countries of the former Soviet Union and Yugoslavia (Russia, Byelorussia, Moldavia, Macedonia, Bosnia and Herzegovina). The highest age at marriage in Europe is in Netherlands, Spain and Nordic countries. The age range when contracting first marriages in Europe is more than 8 years for women.

If we wanted to specify the main models of the nuptiality behaviour, determined by the nuptiality level and the age at marriage, we would obtain four groups of countries. The West European countries, together with Spain and Slovenia (western model) record the average or under-average nuptiality and a high age at marriage. The four Visegrad countries, Baltic countries and Bulgaria (central European model) register the low nuptiality and low age at marriage. The East European countries (eastern model) have in common the very low age at marriage.

Croatia, Portugal and Greece (southern model) have over-average nuptiality and the below-average age at marriage. Denmark and Iceland do not belong to any of these groups (high nuptiality, high age at marriage); the same is true for Sweden, which, on the contrary, records the low nuptiality and low age at marriage.

The international comparability of data on the level of divorce is complicated not only by the different legislation on divorce but also by the changing value orientation of population and the increasing share of cohabitation, on the termination of which there is until now no evidence at all. In fact, the continuation of processes, which are related to the entire dynamics of the social and economic development of the new era, is in question. It is mainly the reinforcement of the free choice of people in all areas of human life, whether the choice of occupation, decision on the number of children, emancipation of women or the maintenance of marriage are in question. The experience of the most advanced European countries show that the changing value orientation leads rather to the increase in divorce and even the decreasing nuptiality does not result in its fall.

**Graph 9.2: Divorce in selected European countries in 2001**



In the group of countries with the highest divorce (more than 0,45 divorces per 1 marriage), the Nordic and Baltic countries are to be found together with Austria and the Czech Republic. In Sweden and Finland (countries with the highest divorce), more than 1 divorce fall per two marriages. In the group of countries with the average divorce (0,30 - 0,45 divorces per 1 marriage), mainly the West European countries take place; from Baltic countries Latvia, from the Central Europe Hungary and from the Eastern Europe Ukraine are in question. In the group of countries with the lowest divorce (less than 0,3 divorces per 1 marriage), only countries from the Central, East and South Europe are located. To this group also Slovakia belongs, which among all these countries has the highest divorce. Among the extremes in European level of divorce also more countries belong, which, however, are not presented on the graph because of the lack of newest data. Traditionally very high divorce is recorded in Russia; on the contrary, the very low divorce is to be found in South European countries – Italy, Greece, Macedonia and Bosnia and Herzegovina.

Also this data confirm that the model of divorce behaviour in Europe is relatively stable and that changes in political development from the end of 20<sup>th</sup> century have influenced it only little. The cultural and religious impacts remain still decisive for the level of divorce. Although divorce is increasing in the whole Europe, the relatively low level is maintained by countries with higher religiosity and influence of church.

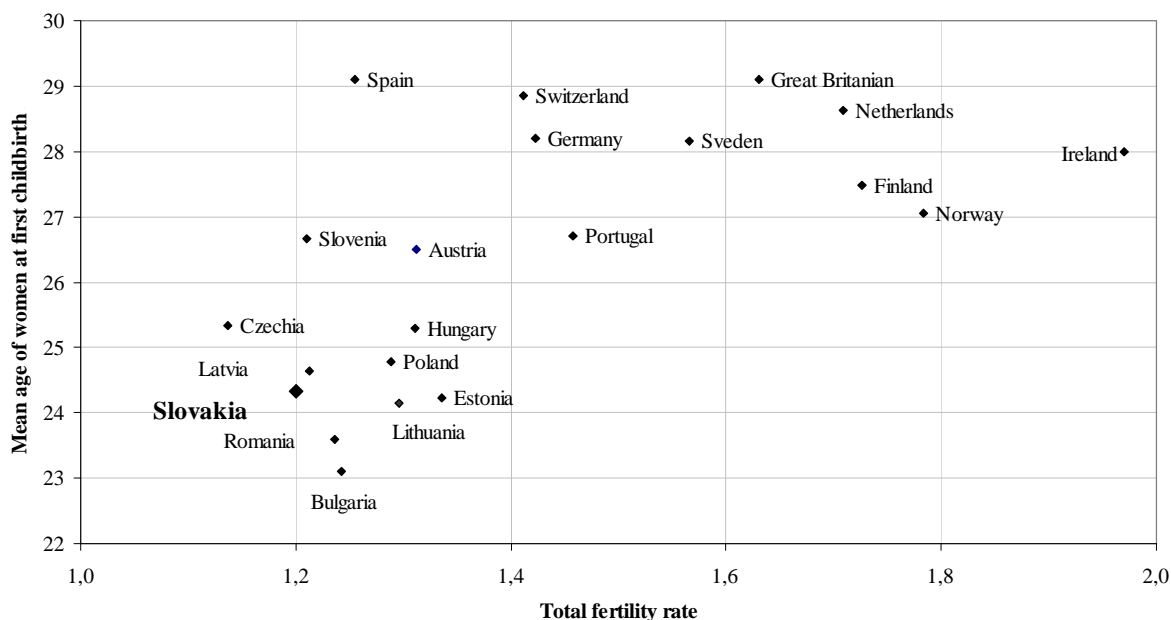
## Nativity

When analysing and assessing the population development, usually the main focus is put on fertility. The current trends in fertility are not equal in individual European countries. In the majority of West and North European countries the values of total fertility have remained stable at the level of 1,5 - 1,8 live-births per one woman or have diminished only moderately.

In some countries the cease of the decrease in fertility was connected to the consequent moderate increase. Mainly France is in question, where the fertility has increased by more than 11% since 1995, what, at the same time, is the highest increase from all European countries. The fertility has increased also in Germany, Netherlands and Sweden. The high fertility at the level or above the level of simple reproduction is among European countries lingeringly maintained in Iceland (2,08), Albania (2,10) and in Turkey (2,51). Also Ireland can be attributed to the countries with lingeringly high fertility. The decrease towards very low values (1,2 - 1,3 live-births per 1 woman) was recorded in South European countries – Italy, Spain and Greece. In Eastern Europe the fall of fertility was the most remarkable one. In nineties the fertility fell in individual countries by 30% - 50%.

Despite the slowdown or the cease of the fall in fertility in the recent years, the East European countries dropped to the very bottom of the European ranking. Slovakia is currently placed among the countries with lowest fertility in Europe. In 2001, the lower fertility than in Slovakia (1,20) was recorded only in the Czech Republic (1,14) and likely also in Ukraine (however the data for 2001 are not available).

**Graph 9.3: Fertility in selected European countries in 2001**



In addition to the gradual convergence of the fertility levels, the second Europe-wide tendency is the increasing mean age at first childbirth. In the group of post-communist countries (except for Slovenia), the mean age of women at first childbirth was lower than 25,5 years. In Slovenia, Austria, Portugal, Finland, Norway and Ireland the mean age of women at first childbirth moved in the range of 26 - 28 years. In other European countries it was higher than 28 years, while in Spain and Great Britain it was approaching the age of 30.

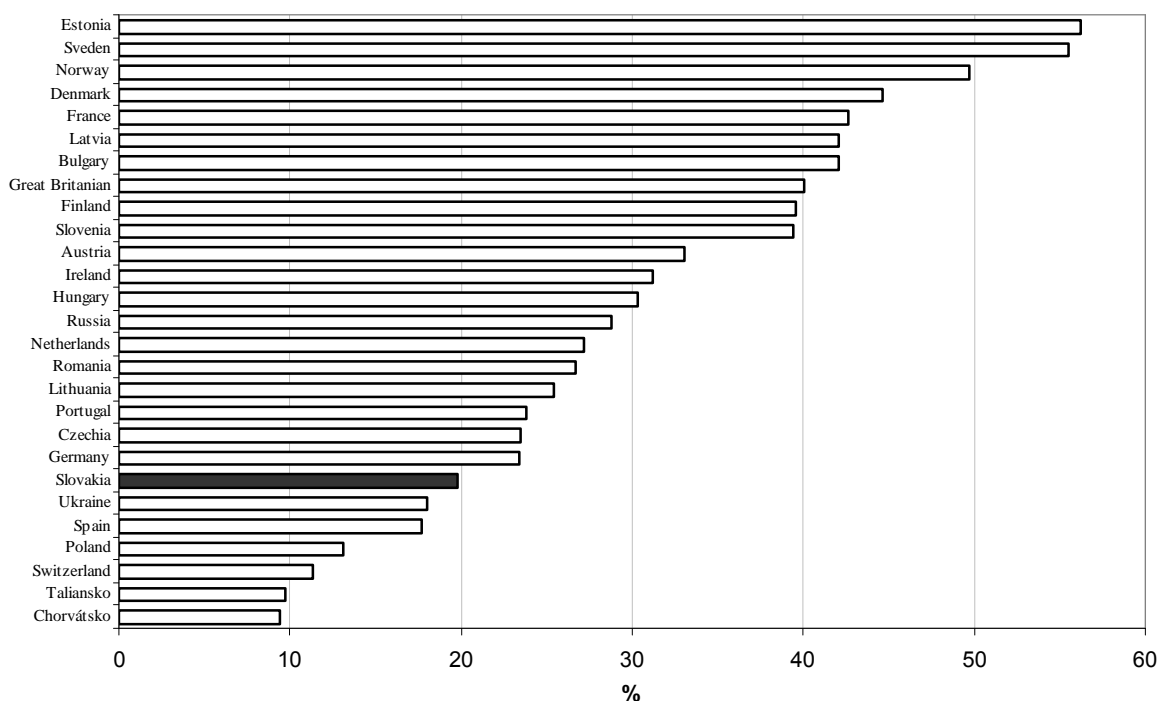
The Slovak Republic lingeringly belongs to the countries with the lowest mean age of women at first childbirth in Europe. In 2001 the mean age of women at first childbirth was from European countries lower only in Romania, Bulgaria, Lithuania, Estonia and in some countries of the former Soviet Union and Yugoslavia (Ukraine, Moldova, Russia, Byelorussia, Macedonia, Bosnia and Herzegovina).

The third tendency, which is to be considered also as an European-wide, is the increase of non-marital fertility. In all European countries with no exception the number of births out of wedlock is increasing, together with their share in the total number of births. At the level of fertility out of wedlock, there are big differences between particular countries, which correspond to the cultural traditions and the religiosity of population. Traditionally the Nordic countries, Baltic countries (except for Lithuania), Great Britain and France belong to the countries with the highest

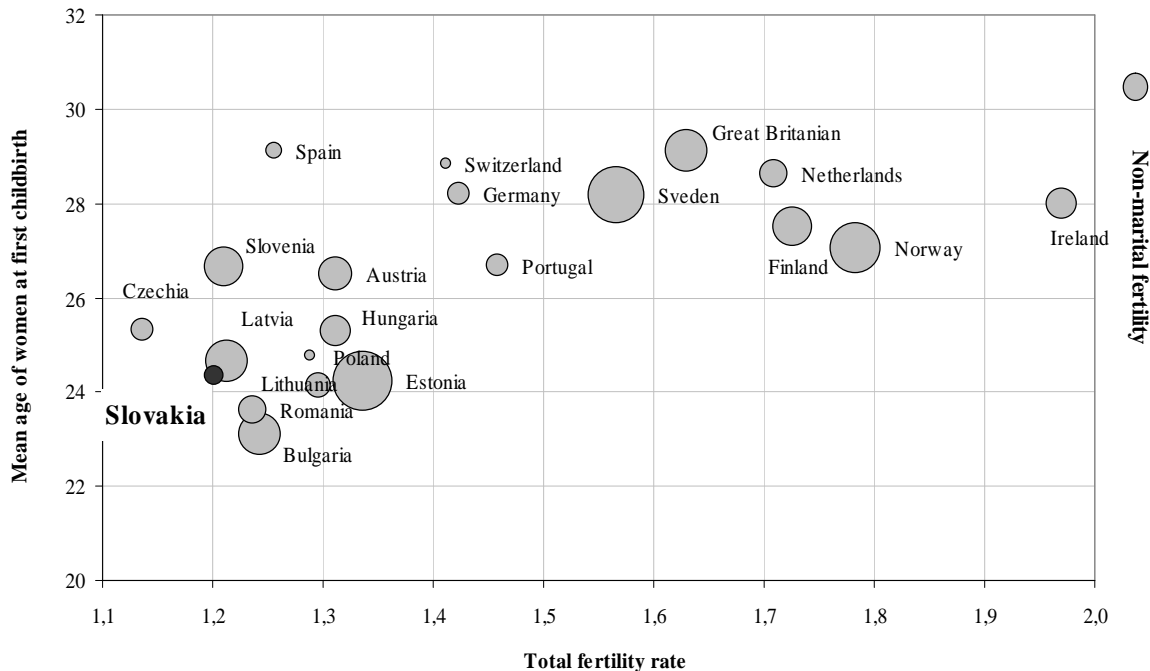


non-marital fertility. From the East European countries only Bulgaria and Slovenia ranked among countries of this group. The share of births out of wedlock is moving in this group above the level of 40%, while in Estonia and Sweden it has already exceeded 55%.

**Graf 9.4: Births out of wedlock in selected European countries in 2001**



**Graph 9.5: Overall assessment of fertility in selected European countries in 2001**



On the other hand there is a group in which the share of births out of wedlock did not reach yet 20% from the total number of births. In 2001 also Slovakia belonged to his group and had in this group of countries the highest non-marital fertility. In addition, Ukraine, Spain, Poland, Switzerland, Italy, Greece, Croatia and Macedonia belonged here. In other European countries, the share of births out of wedlock moved in scope of 20- 40%.

Within the complex assessment of fertility we have taken all three criteria into account – the fertility level, mean age of woman at first childbirth and the level of non-marital fertility. Based on these criteria, the European countries can be divided into several small groups, while the traditional division into two big groups – conservative and liberal countries (supported by the political breakdown of Europe) is not valid any more. Neither large territorial grouping

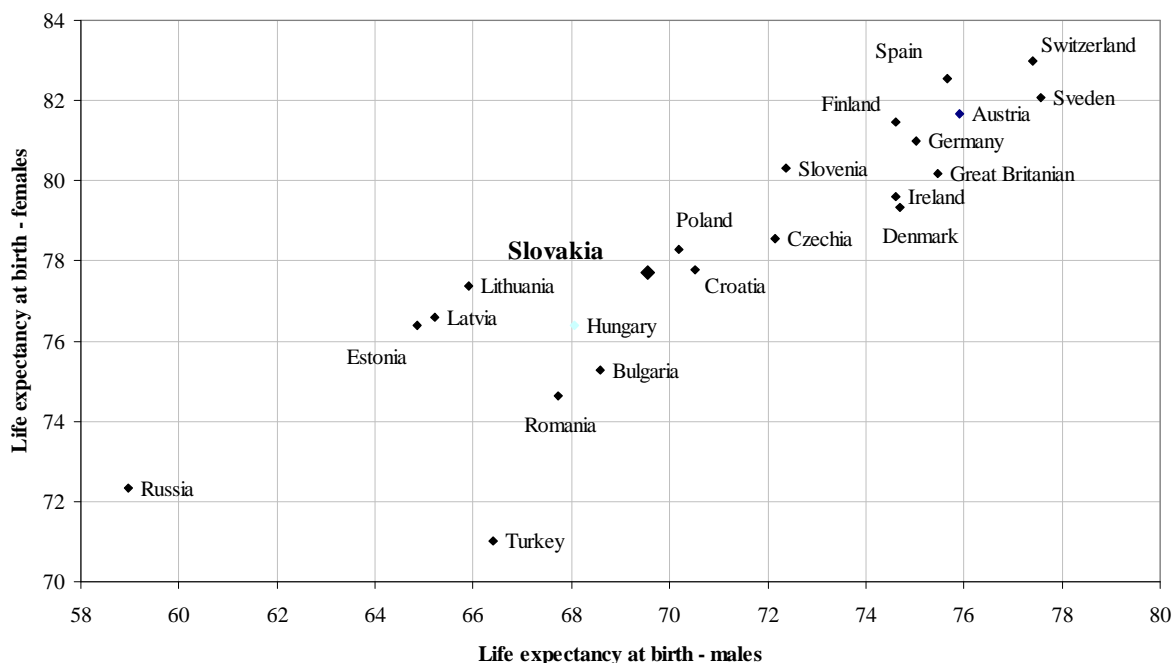
exists. It seems that rather the social and economic situation, in combination with religiosity, plays the role at this point.

The group of countries with low fertility, low age at first childbirth and the low level of non-marital fertility is very well profiled (the Czech Republic, Slovakia, Poland, Romania and Lithuania). Latvia, Estonia and Bulgaria can be marked as countries with low fertility, low age at first childbirth but with high non-marital fertility. Another relative homogenous group is formed by Hungary, Slovenia and Austria, which can be highlighted by low fertility and by the mean age at first childbirth and in case of non-marital fertility. Switzerland, Germany and Portugal record the average level of fertility, rather a higher age at first childbirth and rather a lower non-marital fertility. Sweden and Norway report a relatively high fertility level, high age at first childbirth and a high non-marital fertility. Great Britain, Netherlands and Finland differ from the previous group by a lower non-marital fertility. Ireland and Spain have a relatively independent position among the European countries. Spain, according to the level of total fertility as well as the non-marital fertility is approaching the first group, in which also Slovakia takes place. However, it differs by an essentially higher age of women at first childbirth. On the other hand, Ireland records the high fertility level due to which it cannot be ranked into anyone of the mentioned groupings.

## Mortality

Mortality, together with fertility, represents the basic component of the reproduction of population. For the expression of its level, several indicators can be used; for international comparison the indicator of infant mortality and mainly the comprehensive indicator – life expectancy at birth – are being used.

**Graph 9.6: Life expectancy at birth in selected European countries in 2001**



In the mortality level, mainly the political breakdown of Europe from the second half of the 20<sup>th</sup> century is still reflected. It is logical because mortality, due to a strong biological conditionality, has a long persistence. However, mainly in the group of post-communist countries a certain differentiation is visible, which is caused, on the one hand, by the former level of mortality and, on the other hand, by differences in the current social development. The Czech Republic, Slovenia and Slovakia have a lower mortality level as compared to other countries of the former East block. Slovenia, according to the level of female mortality, reached the level of Western countries. All countries of the former West block are located in the group with low mortality. Despite the high number of countries in this group, the differences between particular countries are not big.

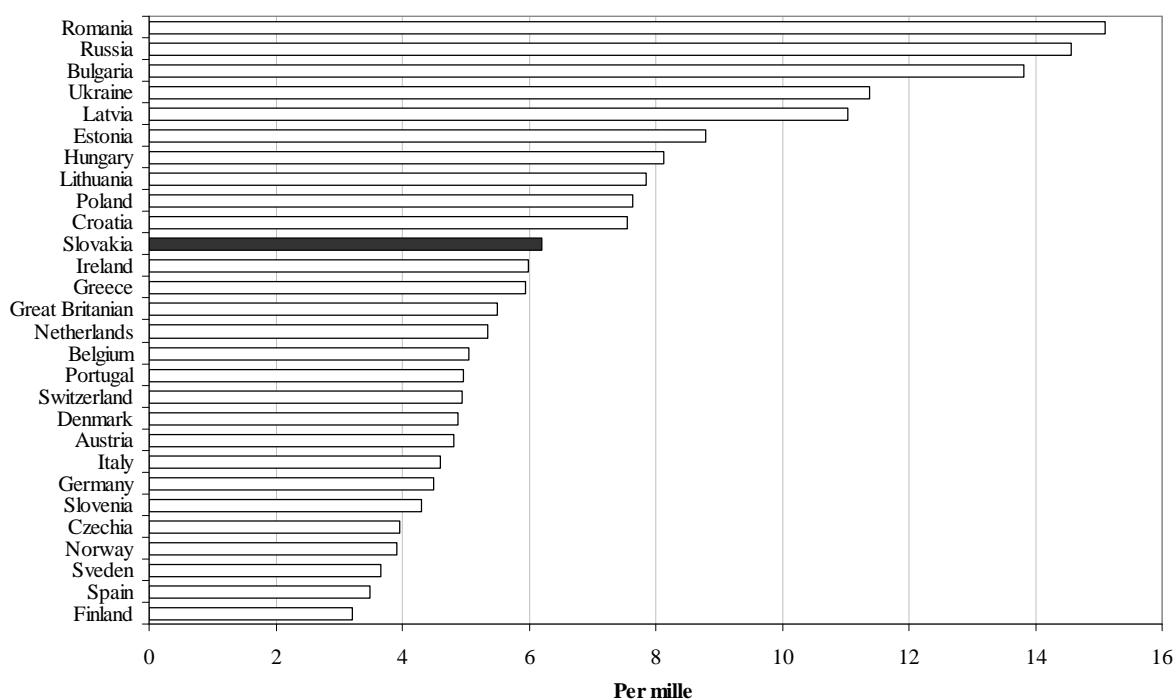
According to the level of mortality the following countries fall behind the both groups: Turkey (female mortality), and countries of the former Soviet Union – Russia, Ukraine, Byelorussia, Moldavia (male and female mortality). In case of female mortality the less favourable situation is recorded also in some countries of the former Yugoslavia (Bosnia and Herzegovina, Macedonia).

The difference in life expectancy at birth between countries with the most favourable and the least favourable development in the mortality level is high in case of both genders. If men are concerned, it is nearly 20 years (mainly

due to a very unfavourable situation in Russia), if women are in question, it is 12 years (Turkey, Moldavia and Russia are the mostly lagged countries).

In nineties the decrease of the infant mortality level continued in Europe and currently the majority of European countries reach low values. However, some significant differences remained kept. According to available data, in 2001 eleven European countries reported the levels of infant mortality lower than 5 dead infants per 1000 live-births. The lowest infant mortality is in Finland, Sweden, Norway and Spain. From post-communist countries the Czech Republic and Slovenia are at the best position, while being immediately behind the four countries with the lowest infant mortality in Europe. The Slovak Republic with the value of 6,2 dead infants falling per 1000 live-births is ranked closely to the European average at the 18<sup>th</sup> position. The values being higher than 14 infants per 1000 live-births were in 2001 recorded in Russia (14,6 ‰), Romania (15,1 ‰) and Moldavia (16,3 ‰). The highest value of infant mortality (however under the condition of an incomplete statistics) is in Turkey (38,7 ‰), what is in comparison with countries reporting the lowest infant mortality roughly a ten times higher value.

**Graph 9.7: Infant mortality rate in selected European countries in 2001**

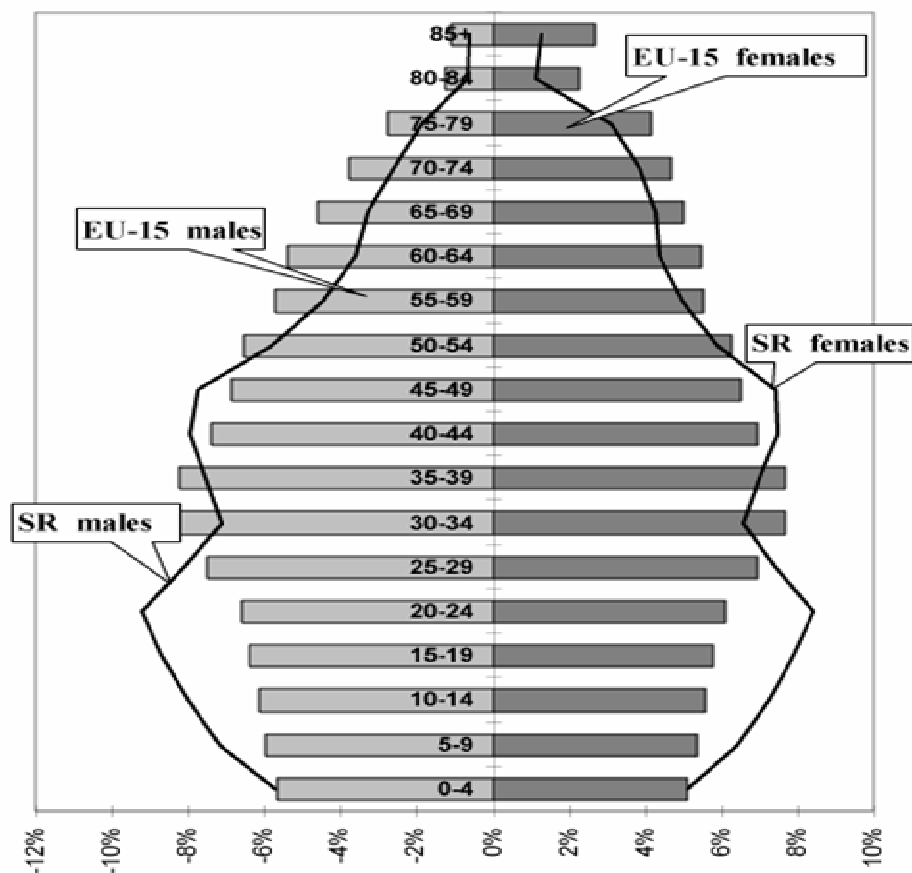


## Age structure of population

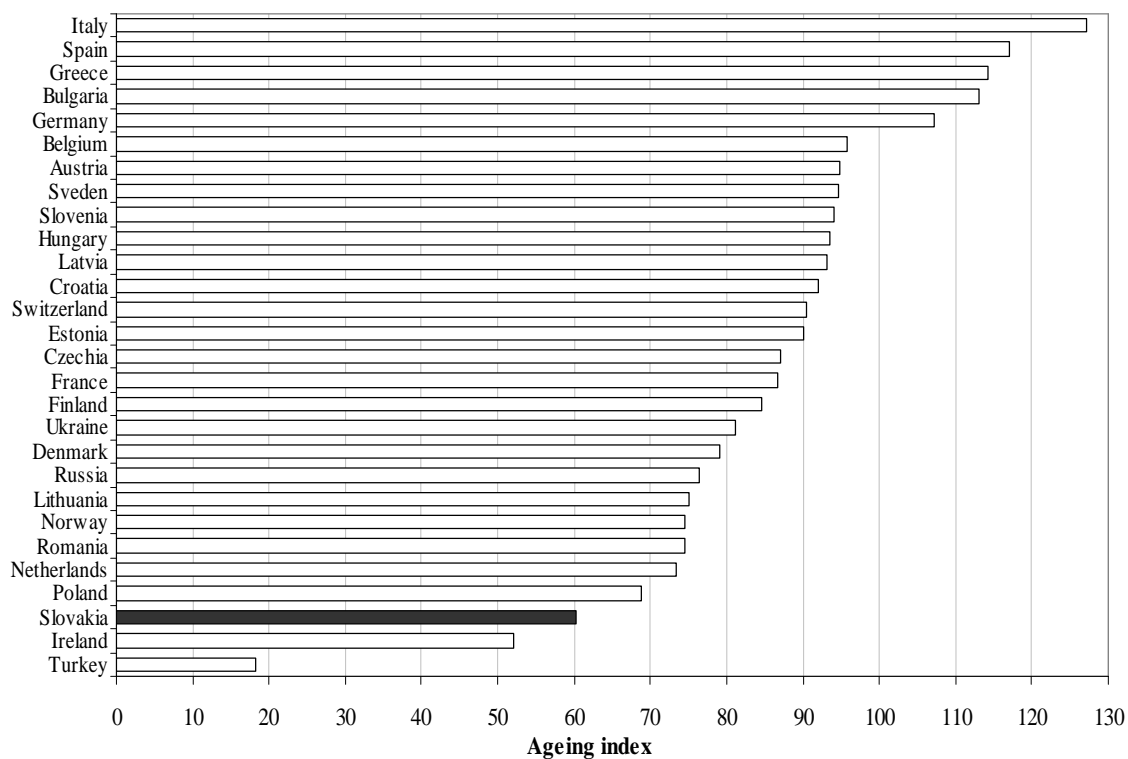
Age structure of European population is due to the former development uneven. Not too calm 20<sup>th</sup> century remarkably influenced the population development of the majority of European countries and contributed to the deepening of deformations of their age structure. In age pyramids one can see the consequences of both big war conflicts from the first half of the century and of the economic crisis in thirties, as well as of the transition to the new model of the reproductive behaviour in the second half of the 20<sup>th</sup> century. Political breakdown of Europe and the different course of reproductive processes being connected to it caused also differences in the age structure of population. As compared to the age structure of population of EU member countries (EU 15), the age structure of population in post-communist countries is younger and more uneven.

The higher inequality in the age structure of countries of the former East block is caused mainly by two facts. Firstly, in some cases a convergence of objective and subjective impacts on the age structure occurred. Thus, the influence of demographic regularities was even reinforced by socio-economic impacts, which frequently had a form of government measures and interventions. The second reason was in the political situation, which broke the course of some social processes, which in the Western Europe took place from the half of sixties. These processes ran very intensively only after the change in regime what again had a negative impact on the inequality of the age structure in these countries.

**Graph 9.8: Comparison of age structure of the population of the SR and the EU member countries in 2001**



**Graph 9.9: Ageing index in selected European countries in 2001**



The ageing of population is a significant feature of the age structure of population, which can be observed in all advanced countries. This process is running in all European countries, however, its intensity is very different. In the West, North and South Europe the process of ageing went on to such extent that it became one of the serious social problems. In the Eastern Europe the process of population ageing is not so intensive yet. Differences are also in the causes of ageing. While in Eastern Europe the population ageing is caused mainly by the decrease of natality and only to lower extent by the decrease of mortality and the prolongation of human life connected to it, in other European countries both these impacts are approximately equal.

The country with the eldest population in Europe is Italy where in 2001 127 people aged 65 and over fell per 100 inhabitants at the pre-productive age. Practically it means that people aged 65 and over prevail in the age structure above the children component of population. Similar situation was also in Greece, Spain, Portugal, Germany and Bulgaria, in which the ageing index exceeded the value of 100. The Slovak Republic according to its age structure belongs among ten European countries with the youngest population (together with Poland, Ireland, Turkey, Albania and some countries of the former Soviet Union and Yugoslavia).



## Conclusion

During the recent time period, the demographic development in the SR did not deviate from the expected frameworks, maybe only except for fertility. The ongoing decrease of fertility, when rather the turning-point in its development has been expected, is undoubtedly surprising. Mainly the development in 2001, when the fertility decreased by more than 7%, was unexpected. Other demographic processes have been developing more or less as expected. The slowdown of the decrease of nuptiality, lasting for several years, culminated in 2002, when the nuptiality increased for the first time after a longer time period. The growth of divorce continued with an increased intensity, mainly in 2001 and 2002. The current divorce rate is in comparison with the year 2000 higher by 22%. The decrease of induced abortion has slowed down, what is however logical, because the remarkable decrease, which was registered during nineties could not go on lingeringly with the same intensity. It seems that the level of induced abortion has approached the border, below which it will fall only very slowly. Also the decreasing tendency in the mortality development has been maintained. In case of men, the decrease of mortality in 2002 was even more intensive as compared to the previous time period, due to which the difference between the life expectancy at birth for men and women decreased to the lowest level during the last 20 years. In the area of migration, no significant changes occurred, at least in connection to the official data. According to them, the SR is still maintaining the positive net migration at the level of several hundreds people per year. However, the reality is undoubtedly different and the estimates speak about the yearly migration shortage at the level of 3-4 thousand people. Also the increasing of the mean age of betrothed couples at marriage and the increasing of the mean age of parents at birth was ongoing. The share of children born out of wedlock has increased nearly threefold as compared to 1990; currently each fifth child is born by an unmarried woman.

The consequence of the mentioned demographic development could only be the slowdown of the population reproduction. The year 2001 will be recorded in history as the first year when more people died than were born in Slovakia, while the natural population decrease continued also in 2002. The value of natural decrease was in both years at the level of only several hundreds of people, thus, the overall increase of population was maintained thanks to the migration increase. The overall yearly increase of population of the SR has been lower by 1000 people since 1997 and it can be expected that also during the forthcoming 15-20 years the stagnation of the number of population will continue approximately at current levels. The period of stagnation will be replaced after 2020 by the period of the decrease of the population number, which according to estimates will last minimally 50 years and which will bring in the decrease of Slovak population down to the level of 4,5-4,8 million.

More remarkable consequences of current and expected development are the changes in the population structure and households. The structure of population by marital status is changing – the share of people living in marriage is decreasing to the prejudice of single, divorced and widowed people. The number of cohabitations is increasing; data for census indicate that the increase during the last ten years is roughly 30%. The structure of families and households is changing as well as their average size. The share of complete families in the total number of households has decreased to the prejudice of incomplete families and households of singles. The increase of households of single persons by 37% during the last decade means that currently each third citizen of the SR consists of a single person household, thus, is living alone or at least is economically managing only him/her.

The change in the age structure of population, which appears as the ageing of population, is to be considered as the most serious structural demographic consequence. At the same time, it is the most remarkable consequence of the demographic development at all. The ongoing process of ageing, which will noticeably accelerate after 2020, will significantly influence the functioning of society. The impacts of ageing on economy, health-care system and on the social security system will undoubtedly belong among the most serious problems of the 21<sup>st</sup> century.

One always has to be aware that the considerations on the future development of population are based on the current „state of art“ and unexpected changes in the horizon of several decades are nothing extraordinary in the demographic development. The uncertainty of the future development is higher also by the fact that the transformation period in Slovakia has not been finalised yet. In the next year we shall be faced with the expansion of the EU and a big question mark will be also the future development of migration in the world. Basic trends, i.e. decreasing of the population number and population ageing, are in the horizon of next decades irreversible. However, their intensity will depend on many factors. In the formation of the future population development also the government should play a more active role, although its possibilities in this direction are restricted. Mainly measures creating the conditions for the establishment and functioning of families, in which more children will be born, are in question. Not only tangible measures might take place. Also the social climate, which can increase the social prestige of family and children, is very important.





# Literature

Jurčová, D. (2002)

Krátky slovník základných demografických pojmov

Bratislava, *INFOSTAT*

Kiškováč, R. (ed) (2002)

Legálna a nelegálna migrácia v Slovenskej republike za rok 2002

Bratislava, *Úrad hraničnej a cudzineckej polície Policajného zboru*

Mládek, J. (ed.) (1998)

Demografia Slovenska

Bratislava, *Univerzita Komenského*

Pavlík, Z., Kučera M. (ed.) (2002)

Populační vývoj České republiky 2001

Praha, *Přírodovědecká fakulta UK*

Pavlík, Z., Kučera M. (ed.) (2002)

Populační vývoj České republiky 1990-2002

Praha, *Přírodovědecká fakulta UK*

Recent demographic development in Europe 2001

Strasbourg, *Council of Europe*

Pollard, J. H.

On the decomposition of changes in expectation of life and differentials in life expectancy

*Demography*, Vol. 25, No. 2, May 1988. 265-76 pp.

Sčítanie ľudu, domov a bytov 1970

Bratislava, *Slovenský štatistický úrad*

Sčítanie ľudu, domov a bytov 1980

Bratislava, *Slovenský štatistický úrad*

Sčítanie ľudu, domov a bytov 1991.

Bratislava, *Slovenský štatistický úrad*

Sčítanie obyvateľov, domov a bytov 2001

Bratislava, *Štatistický úrad SR*

Stav a pohyb obyvateľstva v Slovenskej republike (1950-2002)

Bratislava, *Štatistický úrad SR*

Vaňo, B. (ed.) (2000)

Populačný vývoj v SR 1999

Bratislava, *INFOSTAT*

Vaňo, B. (ed.) (2001)

Obyvateľstvo Slovenska 1945-2000

Bratislava, *INFOSTAT*

Vaňo, B. (ed.) (2002)

Prognóza vývoja obyvateľstva SR do roku 2050

Bratislava, *INFOSTAT*

Vývoj obyvateľstva v Slovenskej republike (1992-2002)

Bratislava, *Štatistický úrad SR*