

The development in natality since 1989 was characterised primarily by the sharp drop in the number of births which began in 1992 and lasted until 1997–1998. The fall in the level of fertility continued in 1998, although the change since 1996 was only slight and it is therefore possible to say that the fertility has stabilised at a very low level. The fall in the total fertility rate since 1993 has been accompanied by a relatively sharp rise in the average age of mothers. This means that the reproductive behaviour of women in the Czech Republic is growing closer to that of their counterparts in western European countries.

While there were no marked swings in the fertility level of Czech women during the 1980s, either in the number or timing of children, the 1990s can be seen as a period of radical change which has moved away from the earlier model of reproduction typical of eastern European countries. This model was characterised by the relatively high level of fertility of married women and by the early age at which they had children. The total fertility rate in the Czech Republic in the 1980s was only slightly below the replacement level which is essential if the population is to be maintained in the long term. Until 1991 total fertility was around 1.9 children for one woman of reproductive age and only 6–7% of women remained childless, meaning that the level of childlessness was barely more than that of physiological infertility.

Natality was closely linked with nuptiality and although there was a slight rise in the number of children born out of wedlock during the 1980s they still represented only 8% of the total. More than half of first children born in wedlock were born within eight months of marriage indicating that marriages were often decided by the woman's pregnancy. This was evidence of the insufficiently widespread use of modern contraceptives. The beginning of a woman's "fertility career" was concentrated between the ages of 18 and 23, i.e. only shortly after reaching legal adult age. These very high fertility rates of women aged 18–20 were typical for most countries in eastern Europe. The very strong prevalence of two-child families was also typical and 80% of women had their second child relatively soon after the birth of the first (about 3 years on average). Many fewer women had a third child and they were most often women in a second marriage who wanted to have a child with their new partner. Women in their first marriage with two children were much more likely to opt for an induced abortion than a third child.

The change in the political, economic and social situation after 1989 also had an impact on reproductive behaviour, particularly in the changing level of fertility. New means of personal fulfilment began to compete with the earlier communist model of the lives of young people. The transition from a paternalistic state to a market economy brought an end to the existing policy of encouraging a high birth rate. A new law on state social benefits in 1995 (no. 117/1995) introduced differential child benefits according to the age of children and the family's income, reversing the earlier system of increasing benefits for each subsequent child up to the fourth. The accessibility of modern contraceptives and a more generally responsible attitude to sexual behaviour led not only to a drop in the number of induced abortions but also to a fall in the total number of conceptions. This brought the sharpest drop in the level of fertility recorded in the Czech Republic to date. Certain economic changes also had a negative effect on natality in this country.

The fall in the level of fertility was closely related to that in the rates of nuptiality. It can be said that the drop in the levels of nuptiality and natality are a manifestation of the transformation of demographic behaviour which began in western European countries in the second half of the 1960s. The gradual fall in fertility before 1989 may have been influenced by these changes but was held back by the state's population and social policies. The earlier fall in the total fertility rate was primarily due to the reduction in the number of higher order births, while that in the 1990s is principally due to the postponement of the birth of the first child.

The development of the process of fertility since 1989 can be divided into two main periods. The first was from 1989 to 1993, when the total fertility rate fell from 1.87 to 1.67 (i.e. by 11%) and the number of live-born children in one year fell from 128,000 to 121,000. The average age of mothers did not change significantly during this period and the distribution of fertility by age remained unimodally asymmetrical, with a peak at the age of 21 until 1992 and at 22 years in 1993. The fall in the fertility rates was greatest among married women aged 20–24 having their first and second children. The total fertility rate of unmarried women, however, rose from 0.14 in 1989 to 0.20 in 1993.

**The Period since 1989 is Characterized by a Significant Fall in the Fertility Level**

**The Fall in the Fertility Rates Was Greatest among Women Aged 20–24**

**Tab. 4.1: Natality 1989–1998**

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Live Births	128,356	130,564	129,354	121,705	121,025	106,579	96,097	90,446	90,657	90,535
Still Births	525	530	496	437	445	336	300	317	273	294
Total Births	128,881	131,094	129,850	122,142	121,470	106,915	96,397	90,763	90,930	90,829
Live Births per 1,000 Inhabitants	12.4	12.7	12.6	11.8	11.8	10.3	9.3	8.8	8.8	8.8
Still Births per 1,000 Live Births	4.1	4.0	3.8	3.6	3.7	3.1	3.1	3.5	3.0	3.2
Live Births out of Wedlock	10,141	11,167	12,703	13,008	15,323	15,507	14,947	15,288	16,125	17,209
– % of Total Live Births	7.9	8.6	9.8	10.7	12.7	14.6	15.6	16.9	17.8	19.0
Total Fertility Rate	1.87	1.89	1.86	1.72	1.67	1.44	1.28	1.18	1.17	1.16
Total Rate of Pregnancies	3.59	3.62	3.52	3.21	2.82	2.34	2.10	1.96	1.91	1.88
% of 1st Children in Wedlock Born within 8 Months of Marriage	52.9	54.4	50.6	54.1	54.5	54.0	50.8	49.0	48.1	47.0p
Average Age of Mother at Birth of Child	24.8	24.8	24.7	24.8	25.0	25.4	25.8	26.1	26.4	26.7p
Average Age of Mother at Birth of First Child	22.5	22.5	22.4	22.5	22.6	22.9	23.3	23.7	24.0	24.3p
Net Reproduction Rate	0.90	0.91	0.89	0.82	0.80	0.69	0.61	0.57	0.56	0.56

The second period was from 1994 to 1998. The decline in the fertility rates accelerated and total fertility rate fell to 1.16 in 1998 (i.e. by a further 31 % since 1993). The greatest fall in the total fertility rate came in 1993–1994 ( from 1.67 to 1.44). The average age of mothers rose to 26.4 years in 1997 and the distribution of fertility by age became less asymmetrical, with a less pronounced peak. The highest levels fall into a wider age span, which in 1998 shifted to the ages 24–26. In this period, the level of fertility for third and subsequent children also began to fall. The rise in the fertility of unmarried women halted, although with the fall in the level of marital fertility the percentage of live-born children outside wedlock continued to grow (from 8.6 % in 1990 to 19.0 % in 1998).

By 1998 the number of live-born children had fallen to 90,535, which is approximately 38,000 (30 %) fewer than in 1989. This drop is all the more surprising in that this period saw the large number of women born in the mid 1970s reach the age of maximum fertility.

**The Fall in Fertility  
Rates is Closely  
Related to the Decline  
in the Level of  
Nuptiality**

The fall in fertility rates after 1989 is closely related to the decline in nuptiality level. Young people began to put off marrying to a later age (nuptiality tables show that the average age of women marrying for the first time rose from 21.8 years in 1989 to 25.4 years in 1997), and also to postpone having their first child after marriage (the average interval between marriage and the birth of the first child rose from 1.18 to 1.48 years). The short-term rise in nuptiality in 1990 led to a slight increase in the total fertility rate for first children in 1991 and for second children in 1993.

The greatest drop was recorded in the total fertility rate for first children which fell by 41 % between 1989 and 1997. Up to 1993 the fall was not so great, being only 14 % for first children, around 10 % for second and third children and the total fertility rate for fourth and subsequent children actually rose. After 1993, however, the fall in the fertility rates for all birth orders accelerated. The drop in total fertility rate for all orders is around 30 % but is greatest for first children. The decrease of the first order total fertility rate contributed 51.9 % of the drop of the total fertility rate, that of second order contributed 35.5 %, of the third order 10.8 %, and higher orders only 1.8 %. In 1997 there was a slight rise in the total fertility rate for first children, primarily thanks to the increase in fertility of married women aged 25–29, and this trend continued in 1998.

The distribution of fertility by the mother's age shows clearly that the main cause of the reduction lies with young women. The age-specific fertility rates for the 17–22 age group fell by more than half between 1989 and 1997. The fertility rates of women over thirty, on the other hand, remained virtually unchanged, which is related to the fact that women over thirty are most often having second or subsequent children. The postponement of first and second births meant that the fertility level for first and second children also rose among women over thirty. Since 1995 second birth order fertility rate in the 30–34 age group is higher than that for third or subsequent birth orders. Although the fertility rate in the 25–29 age group also fell (particularly in 1994–1995) its percentage of total fertility rate rose slightly, while that of the 20–24 age group continued to fall, so in 1998 the fertility level of women aged 25–29 was higher than that of women aged 20–24. The period of maximum fertility also shifted from the 20–24 years period to the 23–27 age group.

**Tab. 4.2: Distribution of Total Fertility Rate by Birth Order and by Fertility of Married and Unmarried Women**

Year	Parity-Specific Total Fertility Rate					Total Fertility Rate	
	1st	2nd	3rd	4th +	Total	Married	Unmarried
1989	0.889	0.706	0.208	0.071	1.874	1.730	0.144
1990	0.897	0.715	0.209	0.073	1.893	1.737	0.156
1991	0.910	0.679	0.199	0.074	1.861	1.686	0.175
1992	0.821	0.638	0.186	0.072	1.714	1.539	0.175
1993	0.765	0.640	0.185	0.078	1.666	1.464	0.202
1994	0.644	0.555	0.168	0.073	1.439	1.237	0.202
1995	0.556	0.511	0.146	0.066	1.278	1.085	0.193
1996	0.520	0.470	0.133	0.063	1.185	0.989	0.196
1997	0.525	0.457	0.132	0.059	1.173	0.967	0.206
Index							
1993/1989	86	91	89	10	89	85	141
1997/1993	69	71	71	75	70	66	102
1997/1989	59	65	64	83	63	56	143

Figures are calculated without taking changes in the numbers of married and unmarried women into account.

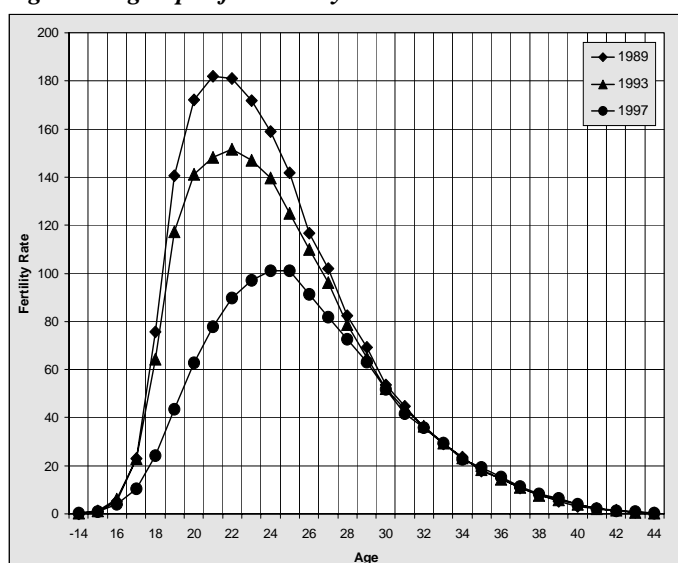
Up to 1993 the drop in age-specific fertility rates was not so dramatic. It affected the 18–25 age group in particular, with the greatest fall being the fertility rate at age 21 (by 18%). In the 1993–1998 period, however, there was a significant decline in the fertility of all women below the age of 28, including the youngest, although since 1997 there has been a slight rise of the fertility of women aged 24 and over.

The average age of mothers at the birth of the first child began to rise after 1992, with the greatest increase coming in 1994–1995 (by 0.4 of a year). In 1989 the average age was 24.8 years and in 1997 it was 26.4. The overall rise in the average age of mothers was accelerated by the drop in first birth order fertility compared to other orders. The increased percentage of children born in second and subsequent orders, so more often to older women, contributed 0.2 years to the increase in the average age of mothers.

**The Average Age of Mothers at the Birth of the First Child Began to Rise after 1992**

First-order fertility fell most among women under the age of 25. In the 25–29 age group the level of first-order fertility only fell up to 1994 and then began to move back towards 1989 level. First-order fertility rates for higher age groups rose throughout the period. In 1995 the age of greatest first-order fertility shifted from 20 to 21 years. The average age at the birth of a first child showed the greatest change, from 22.5 years in 1989 to 24.0 years in 1997, indicating that people are most often postponing the birth of their first child.

**Fig. 4.1: Age-Specific Fertility Rates**



**Fig. 4.2: Total Fertility Rate by Age of Mother**

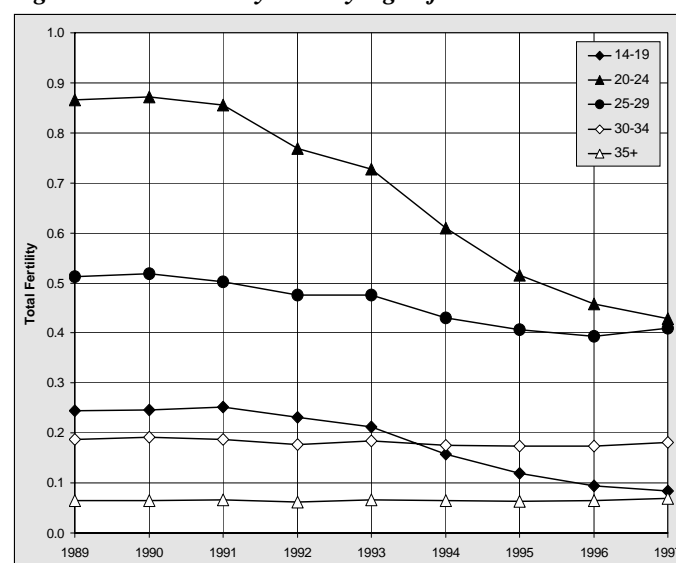


Fig. 4.3: Average Age of Mothers at Birth of Child by Birth Order

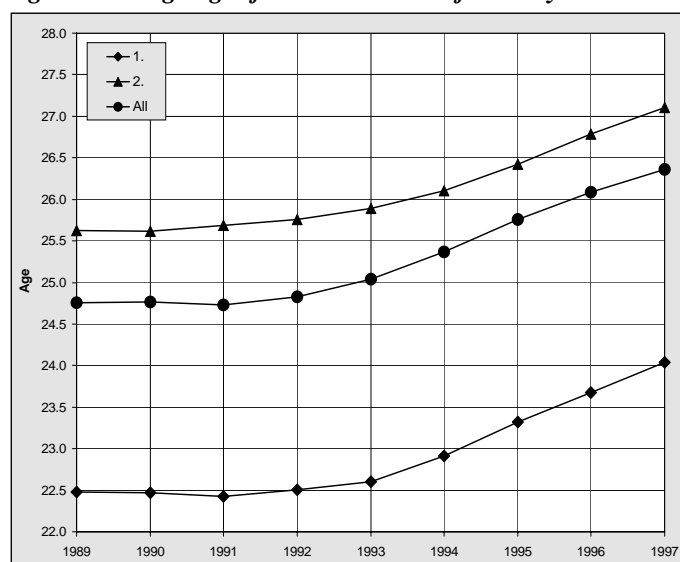
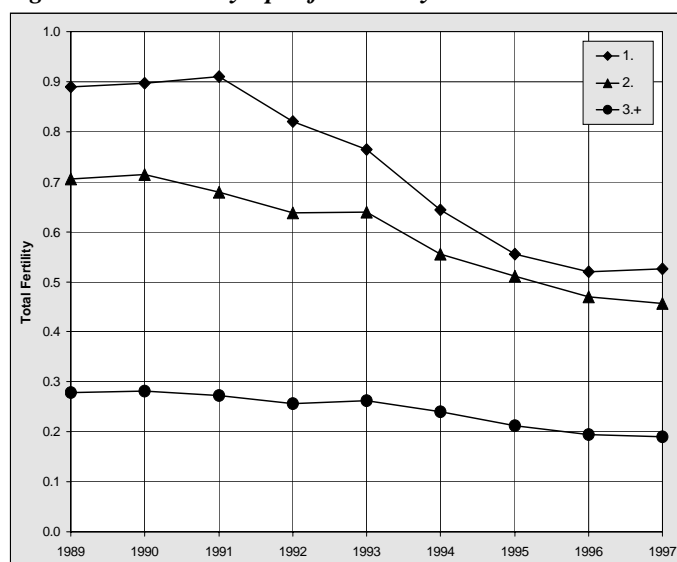


Fig. 4.4: Total Parity-Specific Fertility Rate



Second-order fertility fell most among women under 25 and even women who had already married and had one child often postponed having a second. The second-order fertility rate in the 25–29 age group also fell, although more slowly, and overtook that in the 20–24 age group. In higher age groups second-order fertility rose. The fertility rates for subsequent orders fell in all age groups up to the age of 35 and remained unchanged in the older groups.

Tab. 4.3: Fertility Rates for All Women and Married and Unmarried Women<sup>1</sup>

Age Group	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
All Women										
15–19	44.9	44.6	46.7	44.7	42.8	32.6	24.9	20.0	17.9	16.4
20–24	172.9	174.3	171.3	154.0	145.6	121.8	102.3	91.0	85.5	80.0
25–29	103.9	105.2	101.1	94.8	94.3	85.6	81.4	79.2	82.7	84.8
30–34	36.6	37.4	36.5	35.1	37.1	35.8	35.2	35.1	36.2	37.5
35–39	11.2	11.2	11.1	10.3	11.2	10.7	10.6	11.0	12.0	12.7
40–44	1.6	1.6	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.8
Married Women										
15–19	529.0	507.1	514.1	518.1	515.8	454.5	443.7	443.0	454.8	464.2
20–24	262.1	263.5	260.1	241.4	236.8	210.9	194.5	189.7	197.9	203.5
25–29	119.2	120.6	115.1	108.6	108.1	98.7	95.3	95.4	102.3	108.5
30–34	39.2	39.8	38.6	37.1	38.8	37.3	37.0	37.0	38.7	40.2
35–39	11.2	11.3	11.2	10.1	10.9	10.4	10.5	10.7	11.6	12.3
40–44	1.5	1.6	1.7	1.7	1.7	1.6	1.5	1.5	1.5	1.7
Unmarried Women										
15–19	8.0	8.6	10.1	10.0	11.5	10.6	9.4	8.7	8.9	8.9
20–24	25.0	27.6	30.3	29.4	31.4	29.1	24.5	23.3	22.0	22.3
25–29	32.0	34.1	38.9	36.6	40.0	38.7	37.0	33.7	34.2	33.5
30–34	22.6	25.0	25.4	25.0	29.0	28.7	27.6	27.8	26.7	27.9
35–39	11.3	11.0	10.9	11.2	12.9	12.3	11.1	12.3	13.5	14.2
40–44	1.9	2.0	2.0	2.3	2.3	2.3	2.4	2.2	2.5	2.3

<sup>1</sup>per 1,000 women of the relevant age and marital status

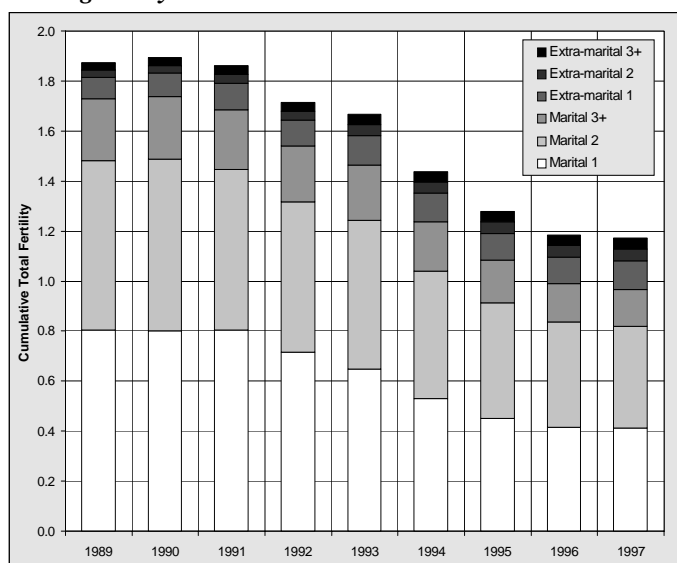
More detailed data by ages can be found in Table 5 and 6 in the Appendix.

**Tab. 4.4: Structure of Live Birth by Mother's Marital Status and by Birth Order**

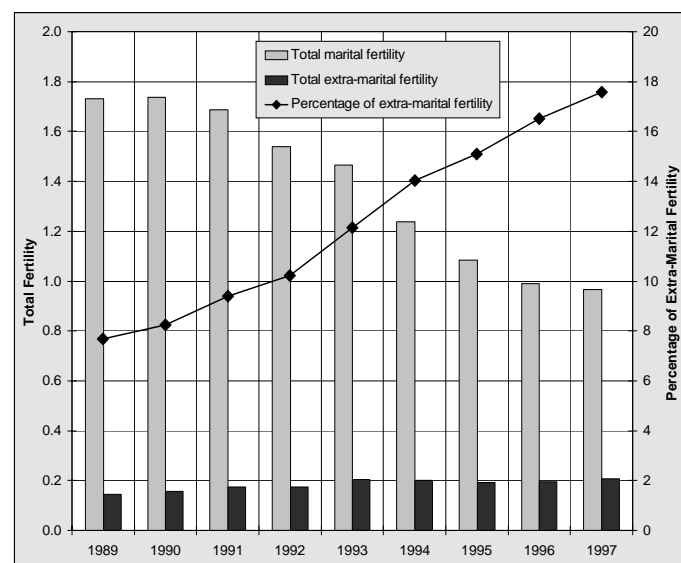
Age	Total Number of Children Born				In Wedlock				Out of Wedlock			
	Total	1st	2nd	3rd +	Total	1st	2nd	3rd +	Total	1st	2nd	3rd +
1989	128,356	60,860	47,942	19,554	118,215	54,825	46,073	17,317	10,141	6,035	1,869	2,237
1990	130,564	62,374	48,546	19,644	119,397	55,580	46,423	17,394	11,167	6,794	2,123	2,250
1991	129,354	64,762	45,916	18,676	116,651	56,859	43,476	16,316	12,703	7,903	2,440	2,360
1992	121,705	60,646	43,567	17,492	108,697	52,666	40,976	15,055	13,008	7,980	2,591	2,437
1993	121,025	58,695	44,477	17,853	105,702	49,367	41,334	15,001	15,323	9,328	3,143	2,852
1994	106,579	50,825	39,345	16,409	91,072	41,604	36,093	13,375	15,507	9,221	3,252	3,034
1995	96,097	44,522	37,026	14,549	81,150	35,877	33,606	11,667	14,947	8,645	3,420	2,882
1996	90,446	42,106	34,817	13,523	75,158	33,450	31,197	10,511	15,288	8,656	3,620	3,012
1997	90,657	42,812	34,520	13,325	74,532	33,492	30,775	10,265	16,125	9,320	3,745	3,060
%												
1989	100.0	47.4	37.4	15.2	100.0	46.4	39.0	14.6	100.0	59.5	18.4	22.1
1990	100.0	47.8	37.2	15.0	100.0	46.5	38.9	14.6	100.0	60.8	19.0	20.2
1991	100.0	50.1	35.5	14.4	100.0	48.7	37.3	14.0	100.0	62.2	19.2	18.6
1992	100.0	49.8	35.8	14.4	100.0	48.5	37.7	13.8	100.0	61.4	19.9	18.7
1993	100.0	48.5	36.7	14.8	100.0	46.7	39.1	14.2	100.0	60.9	20.5	18.6
1994	100.0	47.7	36.9	15.4	100.0	45.7	39.6	14.7	100.0	59.4	21.0	19.6
1995	100.0	46.3	38.5	15.2	100.0	44.2	41.4	14.4	100.0	57.8	22.9	19.3
1996	100.0	46.6	38.5	14.9	100.0	44.5	41.5	14.0	100.0	56.6	23.7	19.7
1997	100.0	47.2	38.1	14.7	100.0	44.9	41.3	13.8	100.0	57.8	23.2	19.0

The main reason behind the decline in fertility since 1989 was the fall in the marital fertility rate. This fell in all age groups, although most among women aged 16–19 (where the real decline began after 1993) and 20–24. Among women aged 16–29, the fall in marital fertility was greatest for second children, as third and subsequent-order fertility dropped in all age groups. First-order marital fertility fell most among women aged 16–24, in the 25–29 age group it fell until 1994, after which the fertility rate gradually began to return to its original level. This is apparently due to people having the children they had postponed earlier. The average age of married mothers rose from 24.8 years in 1989 to 26.6 in 1997.

**Fig. 4.5: Distribution of Total Fertility Rate by Birth Order and Legitimacy**



**Fig. 4.6: Total Fertility Rate by Legitimacy, Percentage of Extra-Marital Births**



In 1997 the percentage of unmarried women in the age of maximum fertility was almost twice that in 1989. The fall in the number of married women together with the decline in the marital fertility rates resulted in a reduction in the number of live-born children in wedlock from 118,000 in 1989 to 75,000 in 1997. The change in the number of married women was responsible for almost 60% of the fall in the number of live births, and the drop in marital fertility accounted for 40%. The percentage

of these effects is different if we consider marital fertility by birth order. For first births the most important factor was the drop in the number of married women (76%) and the fall in marital fertility was not so important (24%). For second births, both factors were of approximately equal importance (47% and 53%), while for third and subsequent births the fall in marital fertility was the predominant factor (68%) and the change in the number of married women was much less important (32%).

The Czech Republic has traditionally had a very high level of pre-marital conceptions. The percentage of first children born within 8 months after marriage has for a long time been around 50% and only in 1996 did it fall to less than half. The sudden fall in 1991 was due to the large number of marriages towards the end of 1990. It would seem, however, that unlike in the period before 1989 this is less a case of marriages due to pregnancy than of wanted pregnancies and wanted children. Sociological surveys have shown that there is a general acceptance of young people living together outside marriage, but primarily as a "trial" before the wedding. People still prefer to marry before having children. The majority of couples living in consensual unions marry shortly before the birth of their first child, so that the number of children born within 8 months after the marriage is still around 50%. For some couples postponing marriage until the woman is pregnant may also be a way of ensuring that they can have a child. On the other hand it is clear that the number of marriages due purely to an unwanted or unexpected (or badly timed) pregnancy is much less significant.

#### **The Share of Unmarried Women is Steadily Rising**

**Tab. 4.5: Percentage of Extra-Marital Births by Birth Order and Five-Year Age Groups of Women**

Order/ Age Group	1989	1990	1991	1992	1993	1994	1995	1996	1997
1st	9.9	10.9	12.2	13.2	15.9	18.1	19.4	20.6	21.8
2nd	3.9	4.4	5.3	5.9	7.1	8.3	9.2	10.4	10.8
3rd+	11.4	11.5	12.6	13.9	16.0	18.5	19.8	22.3	23.0
Total	7.9	8.6	9.8	10.7	12.7	14.5	15.6	16.9	17.8
14-19	16.6	17.9	20.0	20.8	25.2	31.0	36.2	42.4	48.8
20-24	5.5	6.0	6.8	7.9	9.6	11.7	13.0	15.2	16.5
25-29	5.4	5.8	7.1	7.4	8.6	9.9	10.8	11.2	12.0
30-34	9.7	10.6	11.2	11.7	13.3	14.3	14.7	15.8	15.6
35-39	17.1	17.1	17.2	19.4	20.8	21.3	20.1	22.2	23.1
40-44	22.7	22.7	24.5	25.4	26.1	26.8	30.0	28.3	31.7

#### **The Increase in Extra-Marital Fertility Was Highest in the 25-29 Age Group**

The rates of extra-marital fertility grew most up to 1993, since when they have remained largely unchanged. The rise was highest in second-order fertility, indicating that these were probably wanted children born in the increasing number of de facto marriages. At the same time the proportion of first order extra-marital total fertility rate fell and that of second-order fertility rose. The high share of third and subsequent non-marital children (over 20%) is due to the fact that this is the biological order of all children (and these are often children born to divorced women with two children from a previous marriage), although the fertility rate of women living in non-conventional situations (extra-marital with a high rate of fertility) also contributes to this. The increase in extra-marital fertility was highest in the 25-29 age group. The percentage of extra-marital children born to women under 20 rose from 16.6% in 1989 to 48.8% in 1998, which suggests that many young women who previously would have married on becoming pregnant are now remaining single or in consensual marriages. This age group also showed the greatest break in the traditional tie between marriage and having children and showed the greatest reduction in the social pressure to marry on becoming pregnant. After 1993 the rate of extra-marital fertility remained more or less the same, showing an increase again in 1997 primarily among first births in the 25-29 age group. The average age of unmarried mothers rose more slowly than that of married ones, from 24.6 years in 1989 to 25.4 years in 1997.

The change in the nature of fertility since 1989 has already begun to make its mark on generational indices. While the fertility of women born in the mid-1960s corresponds to earlier patterns of reproduction (a completed fertility rate around 1.9 children and an average age of mothers under 25), women born in the early 1970s and even more those born in the "baby boom" of the mid-1970s are exhibiting dramatic changes in reproductive behaviour. Up to now these changes have been manifested in the ever greater fall in fertility up to the age of 25 with each subsequent generation of women having a lower level of fertility. If this is due, at least in part, to the birth of postponed children, it will be the generation of women born in 1973-1975 whose reproductive behaviour will differ most strongly from earlier generations. Some of these women began childbearing at a relatively

early age but the majority have adapted to the changed social and economic conditions and "postponed" having children to a later age. The reduction in the completed fertility rate and the rise in the average age of mothers will be greatest for this generation.

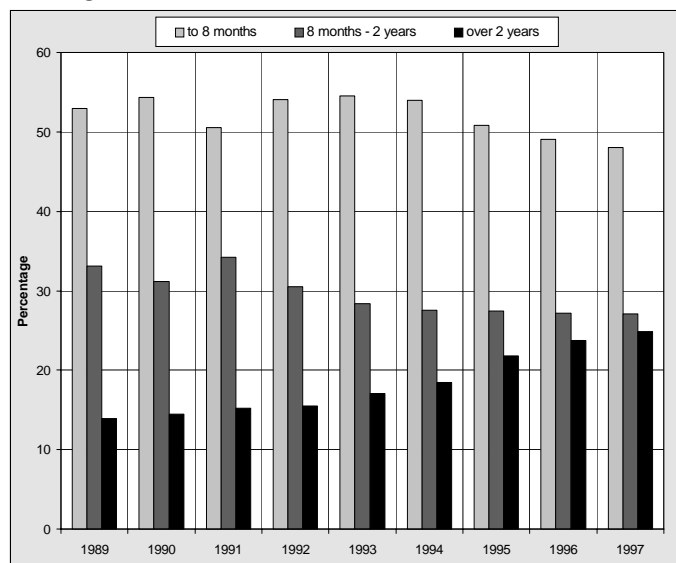
The current developments in the nature of fertility are bringing this country closer to the reproductive model common in western European countries. The more frequent postponing of childbearing to a later age and to some extent the rise in the percentage of childless women or those with only one child mean that the present level of fertility in the Czech Republic is one of the lowest in Europe (in 1997 the only countries with a lower level of fertility were Bulgaria – 1.09, Latvia – 1.11, Spain – 1.16 and the former East Germany – 0.95 in 1996). Thanks to the rapid rise in the average age of women having their first child to 24 years, they are the oldest first-time mothers in the post-communist countries of Europe, with the exception of Slovenia and the former East Germany. The average age of mothers at the birth of a child is still the indicator which most dramatically distinguishes the countries of central and eastern Europe from western European countries in demographic terms. At the same time, however, since 1993 the average age of Czech mothers has risen faster than that in western European countries so that this difference is gradually being reduced.

A second indicator which has been growing closer to those in western European countries was the percentage of extra-marital births. Whereas in the past women giving birth out of wedlock were mostly single without a steady partner, a much greater proportion are now living with the father. Various surveys have shown that around 10% of young people want to live together permanently without marrying. The level of extra-marital fertility is no longer a distinguishing factor between eastern and western Europe, but now distinguishes between countries with differing cultural traditions (which often also have very different legal systems). The figure of 19% of births out of wedlock in 1998 leaves the Czech Republic still among those countries with a relatively low percentage of extra-marital births.

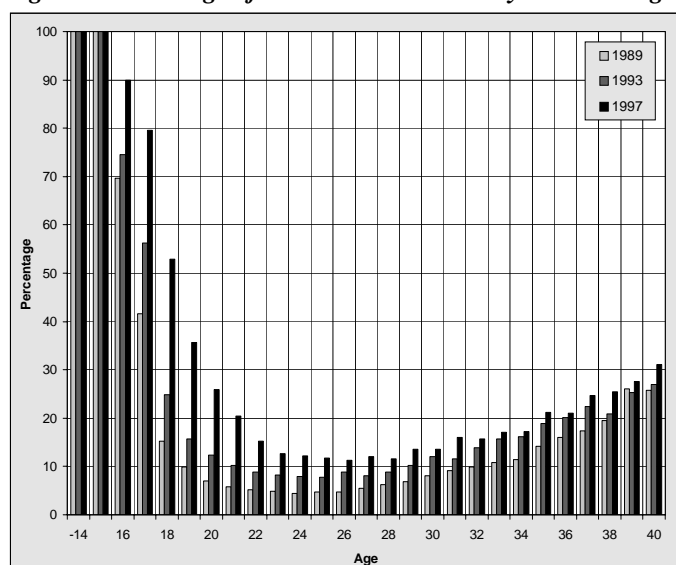
While the 1980s could have been described as having one clearly dominant pattern of reproduction, a spread of different patterns existing in parallel can be expected in the future. A plurality of choices is a feature of modern democratic society and this will undoubtedly manifest itself in reproductive behaviour as well. People are being faced with the possibility of choosing between different life styles which will exist alongside one another. For this reason it can be assumed that while marital fertility will continue to dominate, the percentage of extra-marital children will also increase. It is also likely that an increasing number of women will remain childless, for any of a variety of reasons, or to finish their fertility career after the birth of the first child. The age range at which most women have children will continue to increase and the curve of fertility by age will flatten. It is not yet clear what proportion of women will opt not to have children and what proportion are merely putting it off to a later age.

The phase of dramatic changes in fertility has already ended, the total fertility rate has stabilised at a low level and the shift of fertility to a later age will slow down. The present low level of fertility need not be viewed overly negatively if we take into account the role of the postponement of marriage and childbirth to a later age. The fall in the fertility rate was primarily due to changes in the timing of births and the influence of a real reduction in women's fertility rate has until now been much less significant.

**Fig. 4.7: Percentage of Births in Wedlock by Length of Marriage**



**Fig. 4.8: Percentage of Extra-Marital Births by Mother's Age**



**The Fertility Pattern in the Czech Republic is Becoming Closer to the Western European Model**