Late Fertility Trends in Europe

Janez Malačič University of Ljubljana, Faculty of Economics Kardeljeva ploscad 17, Ljubljana E-mail: janez.malacic@ef.uni-lj.si

Keywords: modern demographic regime, fertility trends, late age-specific fertility, Europe

Received: March 25, 2008

European continent has been for-runner in the demographic transition process. Age-specific fertility patterns had changed tremendously during this process in Europe. However, it is still mainly concentrated in the female age group 20 - 34 years. Women and couples tend to limit fertility in marginal age groups of female's reproductive period. In this paper the author addresses late agespecific fertility trends in selected European countries. Age – specific fertility is relatively low after the age of 35 in modern demographic regime. These rates show very low fertility in the age group 40-44years and only exceptional childbearing in the age group 45 – 49 years. In contrast, the age group 35 – 39 years is not only dynamic but also still important for the procreation. In general, total late fertility was higher in 1960 than in 2003 in majority of European countries. Further increase in total late fertility in most of Europe is likely, Eastern Europe included. However, late age - specific fertility will very likely retain more or less marginal share of total fertility in modern demographic regime. Late age - specific abortion will considerably contribute to this result.

Povzetek: Prispevek obravnava značilnosti pozne rodnosti v Evropi v razmerah sodobnega načina obnavljanja prebivalstva.

Introduction 1

European continent has been for-runner in demographic development for several centuries. The most advanced European countries were pioneers at the beginning and at the end of the demographic transition. The main result of the process of demographic transition in Europe was modern demographic regime. Demographers differ in views about the detailed characteristics of the modern demographic regime and about the timing of its appearance. However, there is general agreement that low fertility and low mortality levels are the most prominent features of the posttransitional demographic regime in Europe.

Broadly speaking, it is possible to state that the modern demographic regime in Europe emerged in the 1950s. At present, it is about sixty years old. It is hardly enough for the development of all facets of the new way of population or generational replacement. We need much longer period if we want to competently compare modern regime with the traditional or pre-transitional regime of population development.

It is also premature to expect that demographers would have reached general consensus on the theory of modern demographic regime. The demographers simply need longer period and more countries and national populations with finished demographic transitions to be able to study modern demographic processes in different environments. From this point of view the so called theory of the second demographic transition is more confusing than illuminating. According to my opinion, it is not wise to speak about the second demographic transition before we really know whether below replacement fertility is one of the main characteristics of the modern demographic regime or not. If the answer is yes, then we do not have any transition at all.

In spite of the theoretical and practical dilemmas it is very important for demographers to study different characteristics of the modern demographic regime in Europe. The author of this paper will focus on late age-specific fertility trends in Europe. Age-specific fertility patterns had changed tremendously during the period of the demographic transition in Europe. A uni-modal distribution of age-specific fertility rates considerably slimmed as a consequence of the fertility decline in younger and older ages of the female reproductive period.

Age-specific fertility in advanced European countries with modern demographic regime is concentrated in the female age group 20 - 34 years. Women and couples tend to limit fertility in marginal age groups of female's reproductive period. Adolescent fertility is not only unwanted but more and more unacceptable for an individual and the society. Main reasons are prolonged schooling and late economic emancipation of young people.

Late age-specific fertility is much more in the domain of an individual woman and her family in spite of the fact that physicians advise avoiding a childbearing after the age of 35 years. Widespread employment of women, low reproductive norms and modern life styles in Europe do not support the childbearing in the period 35 – 49 years of age. Age-specific fertility rates in this period show efficient family planning and the use of modern contraceptives.

In this paper late age-specific fertility is defined by the age group 35-49 years of the females. The author will follow available statistical data on the late age-specific fertility and abortion trends in Europe up to the recent years. He will also try to answer the question how much have late agespecific fertility and abortion changed as the consequence of very low level of fertility and of the postponement of childbearing among young generations. Late fertility and late abortion differentials will also be analysed. The author will devote much attention to the question whether any breakthrough can be anticipated in late age-specific fertility in Europe in the future or should we further maintain the position that childbearing after the woman's age of 35 will remain marginal for still very obvious reasons.

2 Low fertility level in Europe

Generally, fertility level in almost all of Europe is low indeed. All national period total fertility rates in consecutive years 2003 and 2004 were below 2.04 if we exclude Turkey and Albania (RDDE, 2006, p. 78). Particular rates covered wide range between 1.17 in Ukraine in 2003 and 2.04 in Iceland in 2004. Sporadically and regionally the indicator can be even lower. In the lands of former German Democratic Republic it was only 0.84 in 1995. Intrinsic rates of increase of model populations with such fertility levels are negative. If we take for example Slovenian total fertility level of 1.2 in the year 2003, it is possible to calculate the intrinsic rate of -1.9 which means that model population with such a rate would diminish to a half of its original number in only about 37 years.

European fertility decline is also evident in cohort total fertility rates. Completed fertility rates of a female birth cohort born in 1967 were predominantly under 2.0 with the exception of Albania, Armenia, Azerbaijan, Cyprus, Iceland, Ireland (1966), Norway, Serbia and Montenegro and Macedonia (RDDE, 2005, p. 89). Mainland Europe is well below 2.0. Its range was between 1.46 in Germany and 1.99 in France and Slovak Republic in 1967. Below replacement fertility is predominant characteristic of Europe at the beginning of the 21st century.

Low fertility level in Europe is main cause for growing number of countries with negative natural increase. In 1980, only Austria and Federal Republic of Germany had negative natural increase of the population. Ten years later, number of births was lower than number of deaths in three countries

(Bulgaria, Germany and Hungary). At the turn of the century, in 2003, the number was 19 (RDDE, 2006, p. 56) and it will grow in the future.

Mean age of women at birth of first child has been increasing in recent decades in Europe. In spite of some minor problems with missing data it is possible to see considerable increase in the number of countries with the mean age of women at birth of first child of 25 years and more in the period 1970 – 2000. In the years 1970, 1980, 1990 and 2000 there were 4, 8, 16 and 23 such countries respectively in Europe. In 2004, 9 out of 28 countries with published data had the mean age of women at birth of first child of more than 28 years. There were no such countries in 1990 (RDDE, 2006, p. 87).

Trends of the mean age of women at childbearing in Europe in the period 1960 – 2003 are more complex. They have been influenced by the decline of number of births of the higher parity birth orders, which have generally occurred at the higher age of the mother and by the increase of the mean age of women at birth of lower parity birth orders. These two forces have worked in opposite directions. Real trends in the period considered show quite similar pattern in majority of European countries. There was decline in the mean age of women at childbearing till the 1970s or early 1980s. Thereafter, the trend has changed the direction. The mean age of women at childbearing has started to increase. In 2004, there were 21 out of 32 countries with the published data where the mean age of women at childbearing was more than 28 years. In 8 countries the indicator was higher than 30 years. These countries were Andorra, Denmark, Ireland, Liechtenstein, the Netherlands, San Marino, Sweden and Switzerland (RDDE, 2006, p. 88).

Some decades ago G. Calot and C. Blayo wrote about considerable homogenization of fertility in Western Europe (Calot and Blayo, 1982, p. 353). In recent decades the process has spread over the entire continent. However, it is far from universality. In 2000, the difference between the highest (Iceland) and the lowest (Ukraine) total fertility rate in Europe, Albania and Turkey excluded, was still practically one child per woman (RDDE, 2005, p. 76). Therefore, it is possible to conclude that below replacement fertility level is more important characteristic of European fertility than the homogenization.

3 Late age – specific fertility

Late motherhood and postponement of childbearing in Europe are frequent research topics in recent years. Some examples of studies are Van Nimwegen et al, 2002, Sobotka, 2004, Ni Bhrolchain and Toulemon, 2005 and Billari, 2005. It is possible to see different meanings of the terms late motherhood and postponement in these studies. The Dutch authors use the term late motherhood in

the meaning of postponement of the childbearing (Van Nimwegen et al, 2002. p. 10 – 16). Many other authors use the term postponement in two different meanings. The first meaning stresses the possibility of compensation of the fertility decline at younger ages with (at least partial) fertility rise at later ages. The second meaning most often simply refers to an increase in the mean age of first birth or in the mean age at childbearing (Ni Bhrolchain and Toulemon, 2005, p. 86). However, in almost all of these studies very little is said about late age – specific fertility in the last 15 years of female reproductive period.

Late motherhood or late fertility can be understood also from the viewpoint of the late age – specific fertility. The author of this paper studied late age – specific fertility in Europe in the period 1961 – 1985 (Malacic, 1994). Late age – specific fertility considerably decreased in the studied period in Europe. However, toward the end of the period in certain European countries some discontinuities and turnabouts in the prevalent tendency became evident. In spite of that, the author of the paper forecasted in the cited paper that the late age – specific fertility would retain a marginal share in total fertility in Europe in decades to come.

Late age – specific fertility will be analysed in this paper on the basis of age – specific fertility rates in the age groups 35 - 39, 40 - 44 and 45 - 49 years and late total fertility rate in the age group 35 - 49 years which is defined as the sum of five years age – specific fertility rates in the 15 years age range multiplied by five. Late total fertility rate can

be interpreted as the number of childbirths to the hypothetical cohort of women in the age group 35 - 49 years under the condition that registered five years age – specific fertility rates in the age group 35 - 49 years refer to the given cohort of females. Late total fertility rate is not dependent on the age structure of the particular population.

Age – specific fertility is relatively low after the age of 35 for different reasons. They work practically over the whole reproductive age span and can be grouped as follows: 1. intrauterine mortality, postpartum amenorrhea, ovulation without conception; 2. early sterility and possibly higher intrauterine mortality for older women; 3. extension of birth intervals by abstinence or prolonged breast-feeding and 4. birth control by contraception or abortion (Lutz, 1989, p. 7). The one and two groups are more important for natural fertility regime which can be illustrated by Hutterite fertility. Hutterite fertility rates for age groups 35 -39, 40 – 44 and 45 – 49 are 0.406, 0.222 and 0.061 respectively (Malacic, 2006, p. 55). Contraception and abortion are predominant causes of low levels of late age - specific rates in modern fertility regime of present day Europe. They are the consequence of more or less conscious decisions.

Nine European countries and the period 1960 - 2003 will be analysed in this paper. The countries will be divided in three groups. In the first group are Denmark, Sweden and United Kingdom. Their basic characteristic is higher fertility rate in the age group 35 - 39 in 2003 than in 1960. The second group includes France, Germany and Italy. Their size is the main reason for the selection from the

		Denmark	Sweden	UK ¹	France ²	Germany ³	Italy ³	Poland	Russia	Ukraine ⁴
	1960	39.2	39.6	44.1	50.6	44.2	61.2	58.4	53.6	39.6
	1983	15.0	26.0	23.0	22.0	16.0	24.8	30.2	22.2	20.2
$f_{(35-39)}$	1993	33.4	43.4	33.4	32.2	21.6	30.4	25.4	10.8	12.0
	2003	46.6	51.0	46.0	46.6	30.2	42.6	21.0	16.0	11.0
	I _{2003/1983}	310.7	196.2	200.0	211.8	188.7	171.8	69.5	72.1	54.4
	I _{2003/1960}	118.9	128.8	104.3	92.1	68.3	69.6	36.0	29.8	27.8
	1960	11.2	12.0	12.3	15.6	11.8	22.2	21.5	18.8	10.6
	1983	2.4	4.6	4.4	4.4	2.6	5.2	7.4	4.8	3.6
$f_{(40-44)}$	1993	5.0	7.6	5.8	6.2	3.4	5.6	6.2	2.4	2.0
	2003	7.6	9.6	9.4	9.2	4.8	8.0	4.8	2.8	2.0
	I _{2003/1983}	316.7	208.7	213.6	209.1	184.6	153.8	64.0	58.3	55.6
	I _{2003/1960}	67.9	80.0	76.4	59.0	40.7	36.0	22.3	14.9	18.9
	1960	0.8	0.8	0.8	1.0	0.8	1.8	2.3	2.8	1.0
	1983	0.2	0.2	0.4	0.2	0.2	0.4	0.4	0.4	0.4
$f_{(45-49)}$	1993	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.0
	2003	0.2	0.4	0.6	0.4	0.2	0.4	0.2	0.2	0.2
	I _{2003/1983}	100.0	200.0	150.0	200.0	100.0	100.0	50.0	50.0	50.0
	I _{2003/1960}	25.0	50.0	75.0	40.0	25.0	22.2	8.7	7.1	20.0

Table 1: Late age – specific fertility rates (in ‰) and indexes 2003/1983 and 2003/1960 for selected European countries in 1960, 1983, 1993 and 2003. Source: Recent demographic developments in Europe 2004, Council of Europe, Strasbourg 2005; Demographic Yearbook. Special issue: Historical supplement, United Nations, New York 1979

Notes: 1959 instead of 1960: 2002 instead of 2003: 2001 instead of 2003: 41961 instead of 1960.

pool of North – Western, South and Central European countries with typical U shaped f_{35-39} in the studied period. The third group includes Poland, Russia and Ukraine. These countries represent Eastern Europe and to some extent Albania and Turkey. Late age – specific fertility has declined in this group practically over the whole period covered in the analysis.

Late age – specific fertility rates for age groups 35 – 39, 40 – 44 and 45 – 49 and indexes 2003/1983 and 2003/1960 for selected European countries and for the years 1960, 1983, 1993 and 2003 are shown in table 1. Statistical sources do not cover all data demanded in the title of the table 1. Therefore, some minor data substitutions were necessary for particular years and countries. It

should be outlined also that Germany, Russia and Ukraine have not been independent countries in today's state borders since the 1960s. Fortunately, statistical data for these three states in their present size are available for the whole period studied and can be analysed in this paper. Additionally, figures 1-3 are included in the paper to show graphical illustration of the late age – specific fertility trends for two rates f_{35-39} and f_{40-44} for the period 1960-2003. The trends for the three groups of countries are shown separately.

Late age – specific fertility rates in selected European countries show very low fertility in the age groups 40 - 44 and 45 - 49 years. Childbearing in the age group 45 - 49 years is really exceptional in modern Europe. In contrast, the age group 35 - 49 years is really exceptional in modern Europe.

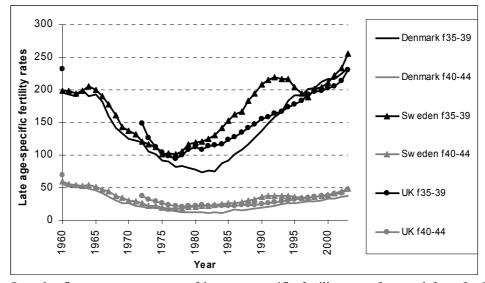


Figure 1: Sum, by five–year age groups, of late age–specific fertility rates f_{35-39} and f_{40-44} for Denmark, Sweden and UK for the period 1960 – 2003. Source: RDDE 2004, Council of Europe, Strasbourg 2005.

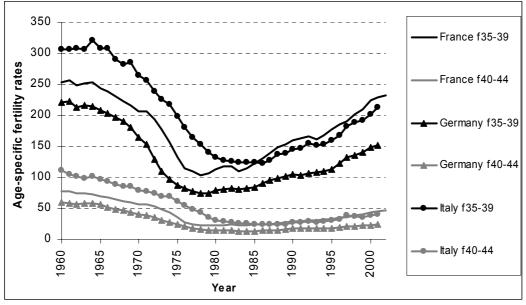


Figure 2: Sum, by five—year age groups, of late age—specific fertility rates f_{35-39} and f_{40-44} for France, Germany and Italy for the period 1960 – 2003. Source: RDDE 2004, Council of Europe, Strasbourg 2005.

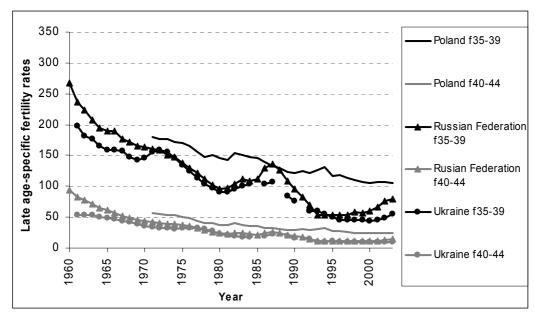


Figure 3: Sum, by five—year age groups, of late age—specific fertility rates f_{35-39} and f_{40-44} for Poland Russian Federation and Ukraine for the period 1960 – 2003. Source: RDDE 2004, Council of Europe, Strasbourg 2005.

39 years is not only dynamic but also still important for the procreation. Our three groups of countries behave differently in this respect. The difference is smaller between for-runners Denmark, Sweden and UK and France, Germany and Italy which represent mainland Europe than between these two groups and the Eastern European group. In the for-runners group we have only three European countries where f₃₅₋₃₉ was higher in 2003 than in 1960. In other respects for-runners and mainland groups are quite similar.

In all six countries three late age–specific fertility rates declined between 1960 and 1983. Thereafter, two of them, f_{35-39} and f_{40-44} , have increased considerably as indexes 2003/1983 show. The third rate, f_{45-49} , remains more or less at very low level.

The dynamics in the Eastern European group

was very simple in the period considered. All three age–specific fertility rates declined and reached at the end of the period practically the same level of particular rates as other six countries had in 1983. In this respect Poland, Russia and Ukraine are late–comers. In Russia, some signs of turnarounds in 1993 were already visible in f_{35-39} and f_{40-44} .

For more complete elaboration of late agespecific fertility it is necessary to compare late and total fertility. Therefore, we have selected some indicators of late and total fertility for selected European countries for the years 1960, 1983, 1993 and 2003. The indicators are shown in table 2.These indicators are total late fertility rate ($T_{f,35+}$), $T_{f,35+}$ as a percent of T_f , percent change of the $T_{f,35+}$ in the period 1983 – 2003 and percent change of the T_f in the period 1983 – 2003.

For-runners and mainland groups show similar

		Denmark	Sweden	UK^1	France ²	Germany ³	Italy ³	Poland	Russia	Ukraine ⁴
	1960	256	262	286	336	284	426	411	376	256
$T_{f, 35+}$	1983	88	154	139	133	94	152	190	137	121
	1993	193	256	197	193	126	181	160	67	70
	2003	272	305	280	281	176	255	130	95	66
T _{f, 35+}	1960	10.0	11.9	11.7	12.3	12.0	17.7	13.8	14.7	11.4
As a %	1983	6.4	9.6	7.8	7.5	6.6	10.1	7.9	6.6	5.9
of T _f	1993	11.0	12.9	11.2	11.6	9.8	14.2	8.6	4.9	4.5
	2003	15.5	17.8	16.4	14.9	13.0	20.4	10.6	7.2	5.5
$\Delta T_{f,35+}$ i	n 1983	+ 209.1	+ 98.1	+101	+ 45.1	+ 87.2	+ 67.8	- 31.6	- 30.7	- 45.5
– 2003 i	n %			.4						
Δ T _f in 1983 –		+ 27.5	+ 6.2	- 3.4	+ 5.6	- 5.6	- 17.2	- 49.0	- 36.8	- 41.7
2003 in %										

Table 2: Selected indicators of late and total fertility for selected European countries in 1960, 1983, 1993 and 2003. Source: RDDE 2004, Council of Europe, Strasbourg 2005; Demographic Yearbook. Special issue: Historical supplement, United Nations, New York 1979.

Notes: 1959 instead of 1960; 2002 instead of 2003; 3 2001 instead of 2003; 4 1961 instead of 1960.

trends in selected late age-specific fertility indicators in the period 1960 - 2003. Total late fertility rate which is un-comparably lower in modern Europe than in the case of Hutterite fertility declined between 1960 and 1983 and has increased thereafter. Similar dynamics characterised total late fertility as the percentage of the total fertility in six countries of the for-runners and mainland groups. In 2003, however, the total late fertility had higher percentage of the total fertility than in the year 1960. In Italy, 20.4 % of period total fertility occurred in the age group 35-49 in the year 2003.

Total late fertility as a percent of total fertility increased considerably in the period 1983 – 2003 in all six countries. The increase was un–comparable to the change of the total fertility rates of these six countries in the same period. In the period studied, total fertility increased in Denmark, Sweden and France and declined in UK, Germany and Italy. It is more than evident that late age–specific fertility trends in the for–runners and mainland groups of European countries indicate certain degree of postponement of childbearing at least in the period 1983 – 2003.

The Eastern European group has had different development in the period studied. Total late and total fertility rates in this group of countries have had declining trends practically to the end of the period. In two decades of the period 1983 – 2003 total fertility declined more than the share of total late in total fertility in Poland and Russia. The opposite was true for Ukraine during the same period. There are no signs of any postponement of childbearing in Poland, Russia and Ukraine in the age groups 35 – 39 or 40 – 44 years yet.Late agespecific fertility differentials

Late age-specific fertility differentials statistical

data are rare in international as well as in national data sources. The data shortage is combined with the differences in periods covered and statistical definitions used in particular countries. The author of this paper uses international data sources mainly. Therefore, very limited picture of the late age-specific fertility differentials can be shown in the paper.

Only three late age–specific fertility differentials will be used on the basis of the rates f_{35-39} , f_{40-44} and f_{45-49} . These three characteristics are birth order, rural–urban residence and marital fertility. Late age–specific fertility rates will be transformed in total late fertility by particular characteristic. The method of calculation and the analytical value of the indicator have been explained in previous section.

In table 3 total late fertility by birth order parity for our selected European countries in the years 1985 and 2001 are shown. Russian Federation and Ukraine are omitted because of the lack of data. The highest birth order parity is 5+ which is appropriate for the selected countries. European females in the age group 35-49 years gave births of different birth order parity in the years 1985 and 2001. Some of them had their first child while others gave birth to the children of higher birth order parity. The highest values of the indicator in table 3 are for the second and the third birth order parity with the exception of France for year 2001.

Parity specific trends in the period 1985-2001 followed the division of the selected countries in the three groups, again with the exception of UK, which is closer to mainland group than to the forrunners group.

The for-runners countries Denmark and Sweden show increase practically in all birth order

Country	Year	Parity						
		Total	1	2	3	4	5+	
Denmark	1985	105	16	32	33	15	8	
	2001	227	47	81	62	23	14	
Sweden	1985	181	27	50	58	28	14	
	2001	281	66	97	70	28	20	
UK ¹	1985	145	26	44	41	21	18	
	2001	198	51	75	42	17	13	
France ²	1985	181	39	47	41	21	23	
	2001	244	93	66	47	20	18	
Germany ³	1985	131	35	46	33	14	11	
	2001	183	56	71	35	12	9	
Italy	1981	153	26	47	42	21	17	
	1997	236	66	101	48	14	7	
Poland	1985	179	16	37	48	39	39	
	2001	115	11	25	31	20	28	

Table 3: Parity–specific total late fertility in selected European countries in the years 1985 and 2001 (sum, by each parity in the group 35–49 years of age of mothers). Source: Demographic Yearbook 1986, United Nations, New York, 1988, pp. 791–815 and Eurostat.

Notes: ¹England and Wales for 1985; ²Marital fertility for 1985; ³Marital fertility and FR Germany for 1985.

parities of the late fertility in the period studied. UK and the countries of mainland group experienced increase in the first three parities and decline for the fourth and 5+ parities. The only country with available data from the Eastern European group, Poland, shows decline for all parities in the period 1985 – 2001.

In the for-runners and mainland groups of countries the highest relative increase happened in the case of the first parity. In France the first parity had the highest value of all parities in the year 2001. This trend clearly shows certain postponement of childbearing in these countries.

Late fertility statistical data in table 3 are very good illustration of the low reproductive norms in the modern demographic regime. Parity specific values of late fertility for the 4th and 5+ birth orders are very low and declining. This is very important for population policy. Parity specific population policy measures should be concentrated in younger ages of females (parents) and for the second and third birth order parity.

Rural – urban and marital late fertility in selected European countries and selected years with available data are shown in table 4. Unfortunately, quite a lot of data are not available. Therefore, the table 4 is only partly informative. In Eastern European countries urban and rural late fertility declined in the period studied while the data on marital fertility are not available for Russian Federation and Ukraine. The case of France which is only other country with limited trend data shows increase of both urban and rural late fertility in the

period 1982 – 1990. Similar trends are likely in other 5 selected countries of the for–runners and mainland groups of countries in spite of the fact that we do not have that data. In Eastern Europe rural late fertility is still higher than urban one, while it is impossible to say the same for other two groups of countries.

Total late marital fertility data for countries with available data are rather old. The data are for the late 1970s and early or middle of the 1980s. Total late marital fertility increased in the period covered in all countries with the exception of Italy. However, this evidence is not very important because of considerable transformations of family structures in Europe in the 1970s and the 1980s. Simultaneously, *de iure* marriages lost importance in comparison with *de facto* unions in almost all countries selected.

4 Late fertility and late abortion

In modern demographic regime family planning is very important part of the way of life. Different forms of male and female contraception are widespread. People usually do not rely on contraception when they want to conceive. However, from time to time even modern contraception fails and people are forced to choose between childbirth and abortion

The frequency of legal induced abortion is an indicator of unwanted pregnancies and failed use of contraception. Abortion rate in particular country depends on legal status of induced abortion and political perception of the fertility level in the

Country		Urban-Rural fertilit	ty	Marital late fertility			
	Year	Urban	Rural	Year	Marital T _{f,}		
					35+		
Denmark	1969	127	185	1978	30		
	1999	n.a.	n.a.	1985	100		
Sweden	1985	n.a.	n.a.	1978	109		
	1999	n.a.	n.a.	1985	188		
UK ¹	1972	188	165	1977	148		
	1999	n.a.	n.a.	1985	146		
France	1982	178	144	1979	129		
	1990	228	178	1985	181		
Germany ²	1981	46	65	1978	115		
	1999	n.a.	n.a.	1985	143		
Italy	1981	n.a.	n.a.	1977	208		
	1999	n.a.	n.a.	1981	171		
Poland	1985	151	268	1978	168		
	1999	110	171	1984	201		
Russia	1989	120	212	n.a.	n.a.		
	1999	60	90	n.a.	n.a.		
Ukraine	1987	114	173	n.a.	n.a.		
	1998	47	80	n.a.	n.a.		

Table 4: Rural–urban and marital late fertility in selected European countries and selected years with available data (sum, by each characteristic in the group 35–49 years of age of mothers). Source: Demographic Yearbook 1986, United Nations, New York, 1988, pp. 655 – 657 and 876–877. Demographic Yearbooks 1992, 1997, 2000 and 2001, United Nations, New York.

Notes: ¹England and Wales in 1972. ²DR Germany in 1981 and FR Germany in 1978 and 1985.

country. Induced abortion is legal in all selected European countries with the exception of Poland. However, political attitude and legal conditions for the realization of the abortion are quite different in particular countries included in this study.

Selected abortion indicators for seven European countries are shown in table 5. Poland and Ukraine are omitted because of unavailable data. Very limited data are available for Russia which has very high total abortion rate. Abortion indicators are constructed in the same way as fertility indicators. There are six abortion indicators in the table 5. They are three age – specific abortion rates, a₃₅₋₃₉, a₄₀₋₄₄ and a₄₅₋₄₉, general abortion rate, a₁₅₋₄₉, total late abortion rate, T_{a,35-49}, and total abortion rate, T_a. The last column of the table 5 shows a percentage of the total late abortion rate in the total abortion rate. Abortion data in table 5 are directly comparable with fertility data in other tables of the paper.

Total abortion rate increased in Sweden, UK and Germany and declined in Denmark, France and Italy in the period covered. In particular years between 1997 and 2001 which are included in the table 5 the percentages of T_a in T_f were 24.5 in Denmark, 35.9 in Sweden, 27.5 in UK, 22.5 in France, 17.9 in Germany and 26.9 in Italy (RDDE, 2005). In Russia, an index T_a/T_f was 196.3 in 1995 which is incomparably higher than in other countries included in the study. It seems that abortion has replaced modern contraceptives as a dominant mean of family planning in Russia.

Late abortion trends were also different in particular countries included in our study and in the period covered. The changes in UK and Italy were considerable. UK experienced increase while in Italy it was decline. The changes in other countries were modest. It was increase in Germany and decline in Denmark, Sweden and France.

However, late abortion represents still considerable share of total abortion in the countries included in our consideration. The share was somewhere between one fifth and one quarter in most countries as is shown in column 9 in table 5. There are again two exceptions. Russia has the lowest and UK has the highest figure in column 9 of the table 5. UK experienced also the highest increase in the period 1985 – 1999. The percentage of total late abortion in total abortion increased from 12.6 in 1985 to 30.3 in 1999 in UK. It is more than obvious that late abortion is important mean for achieving low level of late age – specific fertility in all countries which are included in table 5.

5 Conclusion

Age – specific fertility distribution has shown considerable changes in modern demographic regime. It seems that postponement of childbearing has been the most prominent feature of these changes in Europe in recent decades. The postponement has influenced at least partly late age – specific fertility as well.

Total late fertility increased considerably in the two groups of countries and declined in Eastern European group in the period 1983 – 2003. However, for – runners in total late fertility increase are still rare in Europe. Generally, total late fertility was higher in 1960 than in 2003 in majority of European countries. Further increase in total late fertility in most of Europe is likely, Eastern Europe included. However, late age – specific fertility will very likely retain more or less marginal share of total fertility in modern demographic regime. Late age – specific abortion will considerably contribute to this result.

Country	Year	a ₃₅₋₃₉	a ₄₀₋₄₄	a ₄₅₋₄₉	a ₁₅₋₄₉	T _{a,35-49}	Ta	7/8 in %
Denmark	1985	13.3	6.7	1.0	15.6	105	546	19.2
	2000	13.1	4.8	0.5	12.4	92	433	21.2
Sweden	1985	15.3	7.3	1.0	15.5	118	542	21.8
	2001	16.0	5.7	0.6	15.8	111	563	19.7
UK^1	1985	7.0	2.9	0.3	11.6	51	406	12.6
	1999	14.5	10.5	3.3	13.7	141	465	30.3
France	1984	12.0	5.7	0.8	13.4	92	469	19.6
	1997	11.4	4.9	0.5	11.1	84	389	21.6
Germany ²	1985	6.2	2.4	0.4	5.3	45	185	24.3
	2000	6.6	2.7	0.3	6.8	48	247	19.4
Italy	1982	21.9	9.6	1.0	16.9	162	590	27.5
	1998	11.5	5.5	0.5	9.6	87	326	26.7
Russia	-	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	1995	n.a.	n.a.	n.a.	58.5	390	2630	14.8

Table 5: Selected indicators of late and total abortion for selected European countries and for the years 1985 and 2000 or the nearest year with available data. Source: Demographic Yearbook 1986, United Nations, New York, 1988, pp. 212–219 and 1036–1038; Demographic Yearbooks 1988, 2000 and 2001, United Nations, New York; RDDE, selected issues, Council of Europe, Strasbourg.

Notes: ¹England and Wales in 1985; ²FR Germany in 1985.

References

- [1] Billari, F.C. (2005). *The Transition to Parenthood in European Societies*. Conference Report, European Population Conference 2005, Demographic Challenges for Social Cohesion, Council of Europe, Strasbourg, 7 8 April 2005. 49 p.
- [2] Calot, G. and Blayo C. (1982). Recent course of fertility in Western Europe, *Population Studies*, 1982/3, pp. 349 372.
- [3] Eurostat home page, November 2005 and 2007.
- [4] Lutz, W. (1989). *Distributional Aspects of Human Fertility*. A global comparative study, Academic Press, London. Xi + 282 p.
- [5] Malacic, J. (1994). Kasni fertilitet i savremena reprodukcija stanovnistva (Late fertility and modern reproduction of the population). In: Maksimovic, I., ed. *Prilozi demografskim i ekonomskim naukama* (Contributions to the Demographic and Economic Sciences), SANU (Serbian Academy of Art and Sciences), Monografije, Vol. 103, Beograd. Pp. 189 – 198.
- [6] Malacic, J. (2006). Demografija. Teorija, analiza, metode in modeli (Demography.

- Theory, analysis, methods and models), 6. izdaja, Ekonomska fakulteta, Ljubljana, viii + 339 p.
- [7] Ni Bhrolchain, M. and Toulemon, L. (2005). Does Postponement Explain the Trend to Later Childbearing in France? In: Vienna Yearbook of Population Research 2005, Vienna Institute of Demography, Austrian Academy of Sciences. Pp. 83 – 107.
- [8] Recent demographic developments in Europe (RDDE), different yearly issues, Council of Europe, Strasbourg.
- [9] Sabotka, T. (2004). Is lowest low fertility in Europe explained by the postponement of childbearing. *Population and Development Review*, 2004/2, pp. 195 220.
- [10] Van Nimwegen, N. et al (2002). Late motherhood in the Netherlands: current trends, attitudes and policies, *Genus*, 2002/2, pp. 9 34.
- [11] United Nations (1979). Demographic Yearbook. Special issue: Historical supplement, New York.
- [12] United Nations, Demographic Yearbook, different issues, New York