Population Reproduction in the Baltic Region

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In this article an attempt is made to characterize the population reproduction in the Soviet republics and the countries of the Baltic region. In this latter group the following countries are embraced: the German Democratic Republic (GDR), Poland, the Federal Republic of Germany (FRG), Denmark, Finland and Sweden. For purposes of comparative analysis data about Norway have also been used. This region is inhabited by population of 145.56 million people, including 7.85 in the Soviet Baltic republics, 54.08 million people in the socialist countries (Poland and GDR), 79.46 million people in the economically developed capitalist countries of the Baltic region (among them 61.05 million live in the FRG) and 4.17 million in Norway. Thus, the total population of the above-mentioned socialist countries and Soviet Baltic republics make 61.9 million but the total population of the region's capitalist countries amounts to 83.6 million.

According to Table 1, there is an evident constancy in the decrease of population in the GDR; in the FRG and Denmark such a tendency was observed in the 1980s³, but in other countries and republics of the given area there is an increase of population. It can be mentioned that the highest rate of population growth is marked in Poland. Such a diversity in the fluctuations of population can be explained by different types of natural population reproduction as well as various net migration.

In the region under discussion net migration predominates, except in Poland and the GDR. Up to the 1980s negative net migration was constantly characteristic of Finland, since 1982 mainly also of the FRG (where a similar negative net migration was also observed in 1974—1976)⁴.

Birth rate

Further attention will be paid to the birth rate and its dynamics in the abovementioned 10 countries and republics.

² The data refer to the average of population in 1986; data about the Soviet Baltic republics are taken

⁴ In the beginning of the 1980s about 5 million foreigners were permanent residents in the FRG. Part of them left the country during 1982—1987.

There have been periods of negative migration also in Sweden e.g. in the 1950s, and in Denmark in the 1950s and in 1981—82.

There are two regions of the Russian S.F.S.R., namely the Kaliningrad region and the Leningrad region that border with the Baltic sea; yet, data about these regions are not taken into account in this paper; mainly because statistical data necessary for comparison have not been published.

³ In Denmark the population decrease started in 1981 (in 1987 there was a slight increase), in the FRG in 1982.

Table 1. Annual resident population in the countries and republics of the Baltic sea area (in thousands).

Country (republic)	1960	1970	1980	1985	1986*
Lithuanian SSR	2783	3147	3433	3587	3622
Latvian SSR	2128	2375	2534	2613	2635
Estonian SSR	1215	1365	1480	1536	1549
GDR	17241	17066	16737	16644	16620
Poland	29703	32657	35578	37203	37460
FRG	53224	60651	61561	61015	61050
Denmark	4649	4929	5123	5114	5120
Finland	4430	4606	4780	4908	4920
Sweden	7480	8042	8310	8350	8370
Norway	3581	3878	4086	4152	4170

^{*}Figures are rounded up

Sources: Narodonaselenie stran mira. Moskva, 1983, str. 14—15; Monthly Bulletin of Statistics. New York, 1987, Nr. 10, pp. 1—5; Statistical Yearbook 1986 (UNESCO), 1987, pp. 1—10; Demographic Yearbook 1985. New York, 1987, pp. 153—154.

Table 2. Crude birth rate and total fertility.

		Crude l	oirth rate		T	otal fertility	rate
	1951— 1955	1966— 1970	1981— 1985	1986	1951— 1955	1966— 1970	1985— 1986***
Lithuania	21.3	17.7	15.8	16.5	2.63*	2.35**	2.14
Latvia	16.4	14.1	15.0	15.9	1.94*	1.93**	2.09
Estonia	18.2	14.9	15.6	15.6	1.95*	2.14**	2.10
GDR	16.6	15.1	14.0	13.4	2.37	2.30	1.74
Poland	30.1	16.6	19.0	17.0	3.63	2.28	2.25
FRG	15.8	16.6	9.8	10.3	2.09	2.34	1.32
Denmark	17.9	16.6	10.2	10.8	2.53	2.24	1.45
Finland	22.8	16.3	13.4	12.4	2.98	2.06	1.62
Sweden	15.5	15.0	11.3	12.2	2.22	2.12	1.73
Norway	18.7	17.7	12.3	12.6	2.60	2.72	1.68

^{*1958-1959}

Sources: Narodnoe khozaistvo SSSR za 70 let. Moskva, 1987, str. 406; Naselenie SSSR. Moskva, 1975, str. 77, 79, 83; Vestnik Statistiki. 1987. Nr. 12, str. 48; Monthly Bulletin of Statistics, pp. 6—7; Rocznik Statystyczny 1987. Warszawa, 1987, s. 48; World Population Prospects. Estimates and Projections as assessed in 1982. N.Y.: UN, 1985, p. 462, 464, 468, 470, 488, 490, 492, 498; Statistisk Årbok 1987. Oslo, 1987, s. 53; Statistisches Jahrbuch 1987 für die Bundesrepublik Deutschland. Stuttgart und Mainz, 1987, s. 70; Average birth rates in the Soviet Baltic republics were calculated by the author. Data about crude rates in the countries from 1981 to 1985, as well as the total fertility rates in the GDR and Poland in 1985—1986 are also the author's calculations.

^{**1969-1970}

^{***}The latest available data for the GDR: 1984-1985; Denmark, Sweden and Norway: 1985

Table 2 shows that in the first half of the 1950s the highest crude birth rate was in Poland (30)⁵, exceeding by far the corresponding data of the other countries. The second highest rate was in Finland, the third in Lithuanian SSR. At a great interval follow Norway, Estonian SSR, Denmark, GDR, Latvian SSR, FRG and Sweden.

After a decade the interval between the maximum and minimum of rates shrank considerably. At that, the maximum birth rate has switched over to Lithuania (21), the second highest was in Poland, the third in Finland. In this decade the given birth rate noticeably increased in the FRG and the GDR, but in the other countries remained within relatively narrow limits of 15.9 to 17.4, and Sweden alone gave a very low rate (14.5).

In the following five-year period (1966—1970) birth rate decreased in 8 countries, yet there was some increase in Norway and Sweden. As previously, the highest rate in the region was in Lithuania, but the lowest birth rate was now in Latvia (14.1; in 1965 even 13.8). These latter figures were also lower in comparison with other European countries. It should be noted that for the first time the average birth rate in 5 socialist countries (15.7) dropped below the average birth rate in 5 capitalist countries (16.4).

In the first half of the 1970s the birth rate noticeably decreased in all the capitalist countries, especially in the FRG and Denmark. In the socialist countries the birth rate remained approximately at the level of the previous five-year period. In Estonia, Latvia and Poland it increased a little, and only in the GDR the decrease of birth rate went on. In the second half of the 1970s a very considerable fall of birth rate took place in the FRG, Sweden and Norway. Its general level decreased also in other countries, with the exception of Poland and Finland. As a result, the birth rate in the capitalist countries was considerably lower than in the socialist countries. In Finland alone it was a little higher than in the GDR. The highest birth rate was as previously in Poland, the lowest in the FRG, where the average rate during 1983—1985 had fallen to 9.6, a figure that is below the rate of any country of the world.⁶ In 1986 there was some increase of the rate in the FRG (10.3).

In the 1980s the birth rate grew in all the Soviet Baltic republics as a result of various implemented measures of the population policy. In the other countries of the region it decreased, with the exception of the FRG where some steps were also taken to stimulate birth rate. Nonetheless, it was again the FRG that had the lowest characteristics of fertility, and, as Table 2 shows, the more precise index of the birth rate — the total fertility rate — had not increased at all in the FRG and had very low values (1.3—1.4).

Since in Finland the 1980s were marked by a considerable decline of birth rate but the GDR almost stabilized it, the situation at present has the following peculiarities: in all the capitalist countries of the region the birth rate is tangibly lower than in any of the smallest socialist countries of the region.

In all the capitalist countries of the region (except Norway) the total fertility rate fell below 2.0 already in the late 1960s and early 1970s. Such a fertility level is con-

⁵ Here and throughout the text and tables all crude rates of natural population movement are given per 1000 persons. Here and henceforth rates about all the countries are given about the period from July 1, 1950 till July 1, 1955. The average annual figures of other five-year period are given in the same way, with the exception of the first half of the 1980s where the given data cover a period from 1981 to 1985. Average annual indexes of the Soviet Baltic republics represent periods of 1951—1955, 1961—1965, 1966—1970, etc.

⁶ In the 1978 FRG already gave a rate (9.4) that had never before been fixed in any country of the world, even less so in a big one.

siderably lower than it is necessary for simple population reproduction. Norway reached this level of fertility in the second half of the 1970s.

In the 1980s the birth rate perceptibly grew in Latvia. It is essential to add that the total fertility rate which had fluctuated between 1.7—1.9 for a long period of time in the mid-1980s again rose above 2.0 and approached the level of the so-called norm of simple population reproduction (2.10—2.15). In Estonia the total fertility rate in the 1970s and early 1980s fluctuated within 2.0—2.1, and then slightly rose. In Lithuania the fertility rate continuously decreased, reaching the minimum in the early 1980s (1.97 in 1980—1982)⁷, after which it rose again in the last years.

After such changes in all the three Baltic republics in 1985—86 an approximately equal level of fertility rate was reached. The total fertility rate in the Baltic republics (2.1) exceeded the corresponding rate in the GDR by 0.4—0.5, and Poland had only insignificant prevalance over them (by 0.1—0.2), since in Poland the lowest level of birth rate was fixed in 1986.

Causes for the decrease of fertility

One of the reasons of the decrease of birth rate in the captalist countries of the region is a significant reduction of marriages and the growth of divorce frequency. Thus, for instance, the crude marriage rate in the Scandinavian countries in the 1950s fluctuated from 7 to 8, while in the early 1980s its average value was 5 only, but in Sweden 4.5 (in 1983 even 4.3.). This figure is also low in the FRG (6). In these countries it is cahracteristic that the first marriage is contracted at a relatively old age. This partly explains the wide dispersion of consensual and temporary unions, unmarried cohabitation before marriage. In Denmark and Sweden almost half of the female population of 20-24 age group live in consensual union, that is respectively 2 and 3 times more than the women who have contracted official marriages (Hoffman-Novotny, 1987). Hence in these countries the share of births, formally registered as illegitimate, steadily grows (United Nations, 1985, 52). In Denmark the share of these births is more than 40 percent. Among European countries Denmark, Sweden and the FRG have one of the highest crude divorce rates (respectively 2.8, 2.3 and 2.1 in 1985). In the first two countries there is a very high frequency of divorces per 1000 contracted marriages.

In all the socialist countries of the region the registered marriage rates are considerably higher than in the capitalist countries. Especially high they are in the Baltic republics — in Latvia and Lithuania (they fluctuate from 9 to 10 since the mid 1980s). Yet, Latvia and Estonia have one of the highest levels of divorces in the world. At the end of the 1970s in Latvia the crude divorce rate was higher than 5 (in 1979 — 5.5), in Estonia it was 4. It is true that the frequency of divorces considerably declined in the 1980s, as a result of it the divorce rate in 1986 fell to 4.2 in Latvia and 3.9 in Estonia. A high divorce rate is marked also in Lithuania (3.3) and the GDR (3.1 in 1985).

Death rate

Now the dynamics of mortality rate will be discussed. Data of Table 3 show that during the period under consideration crude death rates underwent considerably less

⁷ Calculated on the basis: Demographicheskij entziklopedicheskij slovar (DES). Moskva, 1985, str. 227; Narodnonaselenie stran mira, str. 42.

Table 3. Dynamics of crude death rates.

	1951—1955	1966—1970	1981—1985	1986
Lithuania	10.3	8.4	10.5	9.9
Latvia	11.7	10.8	12.7	11.9
Estonia	12.8	10.8	12.3	11.6
GDR	11.9	13.7	13.5	13.4
Poland	11.1	7.6	9.6	10.1
FRG	10.8	11.8	11.6	11.5
Denmark	9.0	10.0	11.1	11.4
Finland	9.7	9.7	9.3	9.6
Sweden	9.8	10.2	11.0	11.1
Norway	8.2	9.7	10.3	9.8

Sources: Narodnoe khozaistvo SSSR za 70 let, str. 407; Naselenie SSSR, str. 77, 79, 83; World Population Prospects, pp. 462—498; Yearbook of Nordic Statistics, pp. 56; Rocznik Statystyczny 1987, s. 48; Statistisches Jahrbuch der DDR 1987, s. 361; Statistisches Jahrbuch 1987 für die Bundesrepublik Deutschland, s. 70; All the average annual death rates of the Soviet republics as well as of the other countries for 1981—1985 have been calculated by the author.

change than the birth rates. Less significant is also the difference of mortality rates among the various countries of the region.

A characteristic trend can be observed: in the countries of lower level of mortality the minimum values of the rates were indicated in the previous decades. Thus, in 5 countries (in the GDR and all the capitalist countries, except Finland) the lowest crude death rates refer to the beginning of the period, i.e. the early 1950s. The Baltic Soviet republics achieved the minimum in the first half of the 1960s,8 when the intensity of mortality was already relatively low but the aging level was not yet so deep as in the years to come. In Finland the lowest crude death rates were fixed during 9.0 a longer period starting from the 1950s till 1984, the minimum in 1982 (YPR, 1987, 95). In Poland these rates declined sharply and in the 1960s the lowest values were fixed not only in the country but also in the whole region. After that these rates showed a trend to increase. Yet, as previously, it was Poland that systematically fixed the minimum death rates in the region up to 1987.9 The explanation of the phenomenon is to be looked for in the more juvenile age structure of population in the region. 10 On the other hand, a considerable decline of birth rate (population aging) in Poland led to even lower mortality rates in Finland in the 1980s, but in 1986 the same occurred in Norway, i.e. in countries with lower mortality level.

The highest crude death rates are constantly indicated in the GDR which is distinguished among other countries of the region by a very high degree of population aging. Thus, in the beginning of the 1970s it was the GDR that excelled among other European countries as a country with the largest share of elderly and aged people of 60 and older in the whole structure of population (22.0 percent). These values were high in Sweden (20.5), the FRG (19.7), also in Norway (18.8) and Denmark (18.1).¹¹

⁸ In all the republics the minimum death rate was shown in 1964; in Lithuania it was 7.4; in Latvia 9.4; in Estonia — 10.0.

⁹ Narodonaselenie stran mira, str. 131-132.

¹⁰ In the 1970s the share of the age group 60 and over was 13 percent but in 1986 it increased to 14.1 (calculated from Rocznik Statystyczny, s. 39). According to modern scales of aging Poland indicates an average level of population aging (See: DES p. 117).

¹¹ Narodonaselenie stran mira, str. 221-222.

In the early — mid- 1980s the share of elderly and aged people increased in all the countries, except the GDR. The maximum was in Sweden (23.0) and Norway (21.3). In the FRG and Denmark it also rose over 20 percent, but in the GDR a noticeable decline took place (to 19.1 percent in 1981 and to 18.2 percent in 1986). At present Finland too belongs to the group of »demographically aging» countries (16.5 in 1980). The Soviet Baltic republics also enter this groups.

Life expectancy

Low mortality and high average life expectancy of population are characteristic of the countries of the region. It has been pointed out that already in the previous century and in the beginning of this century the Scandinavian countries had one of the lowest death rates in the world, particularly it refers to Sweden and Norway.¹³ In fact, the situation did not change even after World War II.

In the second half of the 1940s and the first half of the 1950s the highest values of the life expectancies in the region were in Norway. Already in 1946—1950 for both sexes combined it amounted to 71 years, but in the first half of the 1950s it made 72.7 years. Sweden took the second place in the region with 71.8 years in 1950—1955, and Denmark was the third with 71.0 years. These values were among the highest on the world's scale. After them the FRG, the GDR and Finland followed at a considerable distance.

Data concerning the expectation of life of the population in the Soviet Baltic republics are published only since 1958—1959. In the period of the first population census after the war (1959) in all three republics this figure was about 69 years with a clear trend to increase the values. I have tried to calculate these values for the first half of the 1950s. According to my calculations, the average length of life for persons of both sexes was 64—65 years, and the highest was in Latvia, the lowest in Lithuania, mainly as a consequence of a perceptible difference in infant mortality. This estimation is considerably higher than that for Poland (61) and it is slightly lower than that for Finland (66).

In the 1960s and the first half of the 1970s the highest expectation of life was in Sweden (74—75), however in Norway it is but insignificantly lower. The average life span of the male population was higher in Sweden but for females in Norway. The situation remained stable up to the beginning of the 1980s. ¹⁴ The third place steadily belongs to Denmark all over the period.

For a long time the mortality was lower in the GDR than in the FRG, yet since the second half of the 1970s it is lower in the FRG. A relatively rapid decline in mortality took place also in Poland and Finland during this period. Hence, in the middle of the 1980s the difference in the values of the average life expectancies among the countries of the Baltic region decreased.

By the mid 1960s all the Soviet Baltic republics had achieved relatively high average life expectancy (70—72 years), yet this position was gradually lost since the mortality stayed unchanged during almost two decades, for the males it even increased. As a consequence mortality in Poland became even lower than in Latvia and Estonia

¹² Calculated from Encyclopedia Britannica. Book of the year. Chicago, 1987, p. 797-799.

¹³ An even lower death rate was indicated only in Australia and New Zealand where in the beginning of the 20th century the average life expectancy at birth almost reached 60 years (See: Demographic Yearbook 1948. N.Y.: UN, 1949, pp. 518—520.)

¹⁴ In the middle of the 1980s the average life expectancy of females was higher in Sweden than in Norway.

Table 4. Life expectancy at birth for men and women in the mid- 1980s.

	Years	Men	Women	Differ- ence	Women live longer than men,
Lithuania	1985—1986	66.8	75.9	9.1	13.6
Latvia	1985—1986	65.5	74.5	9.0	13.7
Estonia	1985—1986	65.5	74.9	9.4	14.4
GDR	1985	69.5	75.4	5.9	10.6
Poland	1986	66.8	75.1	8.3	12.4
FRG	1983—1985	71.2	77.8	6.6	9.3
Denmark	1984—1985	71.6	77.5	5.9	8.2
Finland	1985	70.1	78.5	8.4	11.9
Sweden	1985	73.8	79.7	5.9	8.0
Norway	1984—1985	72.8	79.5	6.7	9.2

Sources: Narodnoe khozyaistvo SSSR za 70 let. M., 1987, s. 409; Yearbook of Nordic Statistics 1986, p. 68; Demographic Yearbook 1985, p. 146; Statistisches Jahrbuch 1987 für die Bundesrepublik Deutschland, s. 76.

and in the 1970s the lowest average life expectancy of male population in the region emerged in the Soviet Baltic republics¹⁵, and the very lowest life expectancy, was represented in Latvia (especially in rural areas). In the 1980s the life expectancy perceptibly grew even if the gap between it and the corresponding figures in Scandinavian countries remained rather wide, especially for males. The life expectancy in Lithuania, Latvia and Estonia remained one of the lowest in Europe and among economically developed countries of the world, although it was higher than the average level in the USSR on the whole. (In 1985—1986 it was 66.8 for men, in Lithuania, 65.5 in Latvia and 65.5 in Estonia; 64.2 was the average in the Soviet Union.)

In the Soviet Baltic republics as well as in Finland and Poland there is a great difference between the life expectancy of males and females. In the author's opinion, this is largely connected with the high rate of men's cardiovascular mortality and hard drinking habits and, in this connection with more frequent mortality from violent causes of death, with the so called alcohol associated diseases (cirrhosis of liver, diseases of the pancreas, alcohol psychosis and alcoholism). Evidently, far consequences of the war have played a certain role here (the loss of the healthiest part of young male population in the war).

Among the Soviet republics of the USSR, Lithuania was the 4th as to the life expectancy of males in 1985—1986 (after Armenia, Georgia and Tadzhikistan), Latvia and Estonia occupied only the 85th and 9th place after Belorussia and Ukraine. Lithuania had the highest life expectancy for women in these years. Estonia was the 5th (after Lithuania, Armenia, Belorussia and Georgia), but Latvia the sixth-seventh. ¹⁶

Infant mortality

Let us take a special view of the situation in the infant mortality. The area has always had one of the lowest indications in the world of infant mortality. In the post-

¹⁵ The average life expectancy of male population in the 1970s and 1980s was approximately equal in Lithuania and Poland.

¹⁶ Narodnoe khozyaistvo SSSR za 70 let, s. 409.

Table 5. Infant mortality rates.

	19	51—1955	1965—	-1970	1981	1—1985	1985	-1986
Lithuania		73*	22	2		15	12	.9
Latvia		52	18	3		14	13	.0
Estonia		66*	18	3		16	15	.0
GDR		58	21			12	9	.4
Poland		95	36			21	17	.9
FRG		48	23	1		13	8	.8
Denmark		28	16	,		8	7	.9**
Finland		34	1.5	;		7	6	.1
Sweden		20	13			7	6	.4
Norway		23	14	icia ney o		8	8	.5**

^{*}the average from the data in 1950 and 1955

Calculated from: Narodnoe khozyaistvo SSSR za 70 let. s. 408.; World Population Prospects, pp. 462—498; Nordic Demography. Bulletin of the Nordic Demographic Society. Vol. 16, Oslo, 1987, pp. 51, 53, 58, 60; Statistisches Jahrbuch der DDR 1987, s. 360; Statistisches Jahrbuch 1987 für die Bundesrepublik Deutschland, s. 70; Rocznik Statystyczny 1987, s. 48.

war period it was in Sweden and Norway which had the lowest values of infant mortality in Europe. It should be added that the infant mortality in the other countries the countries of the same area included - differed greatly from those in Sweden and Norway. In the first half of the 1950s in the FRG this level (48 infant deaths per 1000 live births) was more than too times higher, in the GDR and in the Soviet Baltic republics it was almost 3 times higher, but in Poland even four-five times higher than in Sweden and Norway (where it respectively was 20 and 23). Later the infant mortality decreased in all the countries of the region, its differentiation decreased. too. In the 1960s, as previously, the minimum coefficient was in Sweden (13 in 1965), the maximum in Poland (42). There was a very essential decrease of infant mortality rate at the beginning of the 1970s in Finland (13 in 1970) and in the Soviet Baltic republics (18-19). During the last two decades the infant mortality decreased approximately by one half in the GDR, Poland, Denmark and Norway, but in the FRG, Sweden and especially in Finland the decrease was even more marked. In this respect there is considerably less success in the Soviet Baltic republics (see Table 5). Among them the lowest level of infant mortality reached in Latvia (13.0 in 1985 and 1986, 11.3 in 1987), but the least progress was made in Estonia. As a result of this at present the capitalist countries of the region retain lower infant death rates than the socialist countries. It should be added that the infant mortality in Finland and Sweden is the lowest not only in the region but in the whole world, 6 infant deaths per 1000 live births in 1985—1986.17

It is more than four times lower than in the USSR on the whole (25.7 in 1985—1986).¹⁸

^{**1985}

¹⁷ Approximately the same level is achieved in Japan and Iceland (see: Demographic Yearbook 1985, p. 146—147).

¹⁸ Narodnoe khozyaistvo za 70 let — s. 408. It must be taken into account that the method of calculation of the infant mortality rates in the USSR differs from that recommended by the WHO. Some analysis shows that the Soviet definition makes the reported infant mortality rates lower compared to the way the rates are defined by international standards. (See e.g.: Anderson B., Silver B. Infant mortality in the Soviet Union: regional differences and measurement issues. Population and Development Review. Vol. 12, No. 4., December 1986, pp. 705—737).

Reproduction

During the first post-war years a relatively high birth rate in all the countries of the region (except the FRG) ensured simple or slightly enlarged reproduction of population. In the first half of the 1950s the net reproduction rates of hypothetical cohorts in all the countries were above one, as previously, with the exception in the FRG and also in Latvia and Estonia¹⁹, where these indicators were within 0.90 and 0.99. This coefficient was high in Poland (1.5) and also in Finland (1.4). In the following decades there was a noticeable decline of these indices in the two latter countries,²⁰ while in the rest of the countries of the region — it became stable or even increased.

In the 1960s the highest level of population reproduction was in Norway (net reproduction 1.36 in 1960—1964, and 1.29 in 1965—1969). A slightly increased generations' reproduction was also achieved in the FRG, but as previously it was below replacement in Latvia and Estonia. In Latvia this situation remained till the second half of the 1980s²¹, but in Estonia there have been some previous periods when simple reproduction of population was ensured (0.99 in 1985—1986).

A sharp decline of fertility in the second half of the 1960s and the first half of the 1970s in the GDR, Denmark, Sweden, Finland and the FRG determined the fact that in all of them the net reproduction coefficient was below one already at the end of the 1960s. And in Norway alone, where the birth rate in the mid 1960s was relatively very high (the total fertility rate in 1964 was 2.96, in 1965 2.93), the transition to reduced reproduction took place somewhat later — at the end of the first half of the 1970s (total fertility rate was 2.23 in 1973, 2.13 in 1974 and 1.98 in 1975). During the last years the net coefficient of population reproduction in the FRG and Denmark has fallen even to 0.6—0.7.²² It is only slightly higher (0.8)²³ in the other capitalist countries of the region and in the GDR.

In Lithuania a full recovery of hypothetical cohorts was achieved by 1976—1977. Yet, after it fertility declined slightly below the replacement level. At the end of the 1970s even the gross reproduction rate fell below one (in 1979—1980 it was 0.98), thus the minimum was reached at the beginning of the 1980s. Yet, later, after some implemented measures of demographic policy, fertility increased a little, and mortality — declined. In the middle of the 1980s Lithuania had again secured simple reproduction pattern. According to my calculations, the net reproduction rate in 1985—1986 was 1.01.

Thus, since the mid-1970s in Poland alone a slightly increased reproduction level was steadily ensured, specifically in the 1980s the net reproduction rate fluctuated from 1.05 in 1981 and 1986 to 1.14 in 1983. It should be also pointed out that among the urban population of Poland simple reproduction is not achieved yet, in several years the net reproduction rate in urban areas was lower as 0.92 (in 1980, 1981 and 1986).

¹⁹ The gross and net indicators of reproductions in the three Soviet Baltic republics were published in official editions only since 1958—1959, i.e. after the data of the first post-war population census were received. Yet, on the basis of estimates of birth-rate and death-rate intensity a number of authors, the author of this paper included, have calculated the approximate values of these indicators.

²⁰ In 1973 in Finland this coefficient declined well below replacement level to 0.71 (total period fertility 1.49).

²¹ According to our calculations, the net-coefficient of reproduction was 0.99 in 1985—1986.

²² In the FRG this coefficient was the lowest in 1984—1985 (0.605), in Denmark — in 1983 (0.662).
See: Demographic Statistics 1986. Bruxelles, 1986, p. 181; Statistisches Jahrbuch 1987 für die Bundesrepublik Deutschland, s. 70.

²³ Statistisches Jahrbuch 1987 für die Bundesrepublik Deutschland, s. 70. In Sweden in 1986 this coefficient increased up to 0.86 See: Statistisk årsbok 1988, Stockholm, 1987, s. 56.

Summing up, we may conclude that at present in all the capitalist countries of the region there is a very low level of population reproduction. If such a pattern of reproduction is maintained then the decrease of population with each generation can be expected to be 20—40% when they exhaust the stock of the demographic potential which has been stored in the age structure by the previous, more favorable, regimes of reproduction. In the FRG and Denmark this growth potential is already exhausted: in the FRG negative natural increase is observed since 1972, in Denmark since 1981. In the 1980s the number of deaths in the FRG exceeded the number of live births by approximately 100 thousand persons averagely each year, at least in 1986 only in one state (Baden—Württemberg) small natural population increase was indicated.

Natural increase

A low rate of natural increase of population is in Finland, Norway and especially in Sweden (see Table 6). The average rate of natural increase in these countries during 1981—1985 was 4.0, 2.0, and 0.3 accordingly. It can be added that in Sweden in 1981—1983 it was close to zero and only lately it has increased slightly (to 1.0 in 1986). Nonetheless, on the whole the trend of decline of the rate of natural increase can be observed in all these countries. In the future a situation of depopulation is expected, the population forecasts of experts testify to this. Disregarding the positive balance of migration of population in all the Nordic countries a decrease of the absolute number of population is projected: in Sweden and Finland at the end of this century, but in Norway in the beginning of the 21st century. (NC M, 1987, 78; CSO, 1983, 47).

Great decrease in population is prognosed in the FRG and Denmark. So, according to the projections of the specialists of the Statistical Office of the European Communities the amount of population in the FRG will be reduced from 61.03 in 1985 to 59.20 million in 2000, i.e. by 1.83 million people, but during 1985—2020 by 9.86 million people²⁴. In Denmark the prognosis of the reduction is from 5.11 million people in 1985 to 4.73 million people in 2025, or by 0.38 million people. It should be added that such demographic developments are prognosed disregarding the expected positive net migration.

A comparatively sharp decline of birth rate in the GDR since mid-1960s has caused a lowered rate of natural increase, but in 1970—1977 even its negative values. At the end of the 1970s and the first half of the 1980s owing to a relatively active system of demographic and socio-political measures the further decline of fertility was stopped and an increase of its level secured. Yet, in 1985 the natural increase again was a minimum level and in 1986 even negative. Evidently, such fluctuations of the natural increase will remain in this country also in the nearest future.

Calculated from the data of Tables 2 and 3. About Latvia and Finland in 1981—1985 and Sweden in 1986 the data given are more precise (comparing with the difference between birth rate and death rate).

In Poland during the whole post-war period a considerably high natural increase of population was maintained with a tendency to decline, especially lately. Projections show that this level will remain also during the nearest perspective. Judging from the forecasts of the Central Statistical Office of Poland, the number of population in the country will rise up to 39.9 million by 2000 according to the medium

²⁴ Demographic Statistics 1986, p. 87, 184.

Table 6. Natural increase.

	1951—1955	1966—1970	1981—1985	1986
Lithuania	11.0	9.3	5.3	6.6
Latvia	4.7	3.3	2.4	4.0
Estonia	5.4	4.1	3.3	4.0
GDR	4.7	1.4	0.5	0.0
Poland	19.0	9.0	9.4	6.9
FRG	5.0	4.8	-1.8	-1.2
Denmark	8.9	6.6	-0.8	-0.6
Finland	13.1	6.6	4.0	2.8
Sweden	5.7	4.8	0.3	1.0
Norway	10.5	8.0	2.0	2.8
Sources:				

variant, i.e. by 2.3 million people during 1987—2000.²⁵ At that it should be taken into account that the net migration is negative (161 thousand people in 1980—1986).

Positive natural increase of population is steadily observed in all the Soviet Baltic republics. The highest it is in Lithuania, but during the last two decades it is the lowest in Latvia and not only among Baltic republics but among all other Soviet republics of the Soviet Union. In all these republics the rates of natural increase were the lowest at the end of the 1970s and the beginning of the 1980s: 1.0 and 2.6 respectively in Latvia and Estonia in 1979, 4.6 in Lithuania in 1980. The measures of demographic policy that were carried out in the republics of the Baltic region during the 1980s, including measures envisaged in the complex special-purpose programmes of population development, ²⁶ have brought noticeable positive results in the sphere of population reproduction. In the author's opinion, the level of population reproduction approximated the optimum in the Soviet Baltic republics in the mid- 1980s. Nevertheless, the situation is not yet stable enough. Besides, in the existing types of the natural reproduction of population a number of qualitative (structural) shifts can be discerned away from the desired characteristics of population development, that is, unfavorable indices in the very patterns of fertility and mortality.

Opinions and viewpoints

In 1974 the World Population Conference in Bucharest accepted a World Population Plan of Action. Later this Plan was amended and approved at the UN World Population Conference in Mexico in 1984. The Plan contained recommendations that monitoring of population policies should be undertaken continuously and reviewed every two years by the appropriate bodies of the United Nations system since 1977.

According to the latest (sixth) survey data were obtained about the estimations of the demographic development and demographic policy in 170 countries of the world on February 1, 1987, including 7 countries of the region under discussion as well as the Soviet Union (UN, 1987). In 5 countries of the region governments are satis-

²⁵ Rocznik Statystyczny 1987, s. 42.

²⁶ According to the government decision of the Latvian SSR in 1983 for the first time in the USSR the working-out of the republican special-purpose programme »The population of the Latvian SSR in 1986—2000» was started. This programme was accepted in 1986 and now it is a constituent part of the country's plan for economic and social development. See more detailed in: Zvidrinš P. Improvement of regional demographic policy. Regional problems of contemporary demographic development in the USSR (Papers for the second Soviet—Finnish Seminar on Demography). Moscow, 1985, pp. 136—141.

fied with the dynamics of population growth, Denmark included, where the decline of population number has started. In the GDR and the FRG it is admitted that the growth of population is too slow (UN, 1987).²⁷ And only the GDR government considers to raise the population growth rate with the help of corresponding measures of demographic policy.

As to fertility it is acknowledged also by Sweden (besides the GDR and the FRG) that the present level is too low. None of the capitalist countries' governments of the region considers that the attempts to modify the level of fertility have been appro-

priate, though they do not see need for political intervention.

The mortality level and life expectancy in all the countries of the region (except Poland) is regarded as acceptable. In Poland these indications are estimated as unacceptable (also in 1985 survey).

In the above mentioned document, referring to the USSR and the Ukraine both the mortality and fertility levels as well as population growth are recognized as satisfactory. It is also emphasized that the authorities want to maintain the existing rates of population growth. Yet in Belorussia the mortality level and the live expectancy are estimated as unsatisfactory.²⁸

To my mind, in the same way the situation in the field of mortality can be estimated in the Soviet Baltic Republics. Additional measures taken to protect health, to prevent premature deaths and to increase the length of human life in these republics must become a task of primary importance in the demographic and social policy.

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²⁷ In fact depopulation goes on.

²⁸ See: Global Population Policy Database 1987, pp. 163. It must be taken into consideration that the intensity of mortality is lower in Belorussia than in the country in general.