

NATALITY AND FERTILITY OF POPULATION – COMPARATIVE ANALYSIS OF JAPAN AND SLOVAKIA

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Abstract: Natality, as the basic component of the reproduction process, recorded in the long-term development as well as in the development of the recent years distinct changes in Slovakia and in Japan. In the historical development is it possible to identify several common features of indicators of this process in both countries, e.g. the decrease of the crude birth rate and of the total fertility rate, shift of the maximum fertility towards the higher age, increase of the average age of the woman in childbirth. The aim of the contribution is to compare the development of the natality and fertility indicators in Slovakia and in Japan, the revelation of common and different development features as well as the identification of the main factors of this development.

Key words: crude birth rate, total fertility rate, general fertility rate, coefficient of extramarital births

1. INTRODUCTION

Natality is the basic component and condition of the population processes and it will be granted the determinative importance in the whole reproduction process. In the majority of the developed world populations we observe several similarities in the long-term tendencies of the population development, which are considered as natural part of the social development. From the natality, respectively the fertility point of view, it handles about long-term changes characterized e.g. by the decrease of several indicators as the crude birth rate, total fertility rate, general fertility rate and vice versa by the increase of such indicators as the average age of the woman at the birth of child, respectively of the first child, age at which had been achieved the maximum fertility rate and similar phenomena.

We observe the mentioned features of the long-term population development also in populations in Slovakia and in Japan, although it handles about considerably different

populations from the viewpoint of the economic, social, cultural, political and other general characteristics. Right with the mentioned general differences of the observed populations is connected also a number of differences in the development of the population processes that is also in the natality development. These are projected especially into the intensity and velocity of the changes of the individual indicators of the natality process in the time.

The aim of this contribution is therefore the knowledge of the long-term development trends of the natality and fertility in Slovakia and in Japan. But concurrently it handles also about revelation of dominant demographic factors and their influence to the natality development, inevitable part of which is the study of the development of this process in relation to the economic, social and cultural development.

2. DEVELOPMENT OF THE NATALITY AND FERTILITY INDICATORS OF THE DECREASING TREND

2.1 Development of the Crude Birth Rate

During the last 100 years in the Slovak Republic (SR) the crude birth rate dropped from the values 40 – 43‰ (end of the 19th century) to 10 – 12‰ (end of the 20th century), however in Japan in this period decreased the crude birth rate from substantially lower level 30 – 33‰ to the present 9 – 10‰. In the mentioned period in the SR distinctly decreased also the absolute number of living born in one year from 100 – 110 thousand to 55 – 65 thousand, however in Japan only from 1300 – 1500 thousand to 1200 thousand. The falling trend of the natality development was however not uniform in both countries but it was affected by several short periods of increase of their level.

In the year 1872 was the crude birth rate of Japan 17.04‰, while in the SR up to 44.1‰. In the following period up to the World War I had it in Japan a growing tendency, while in the SR falling (Fig. 1). Gradually, with regard to the different trend, the difference between the states was diminishing. In the year 1900 was the birth rate level higher in the SR (39.3‰ against 32.4‰) but in the beginning of the World War I. Japan surpassed by the value 34.8‰ the birth rate level in the SR (34.1‰).

During the World War I the development was different. Slovakia as a part of Austrian-Hungarian Monarchy was involved in the war events, in consequence of which the birth rate dramatically decreased to 14.6‰ in the year 1918. This extremely low value appeared in the birth rate development only in the beginning of the 90s of the 20th century. In Japan decreased the birth rate only by 2‰ to 32.7‰ in the year 1918. This was connected with smaller involvement into the war as compared to the SR. The after-war compensation stage of birth rate was more distinctive in the SR, where it achieved the top in the year 1921 with the level 38.2‰, in Japan it was in the year 1920 with the value 36.2‰, whereby these levels were never more in the further development achieved again.

In the period between the World Wars was for both countries typical the decrease of the birth rate, deepened by the World Economic Recession, which was in the SR more distinct. The minimum had been achieved in Japan in the year 1939 (26.6‰), in the SR one year earlier (21.7‰). In the period of the World War II came to a growth of the birth rate

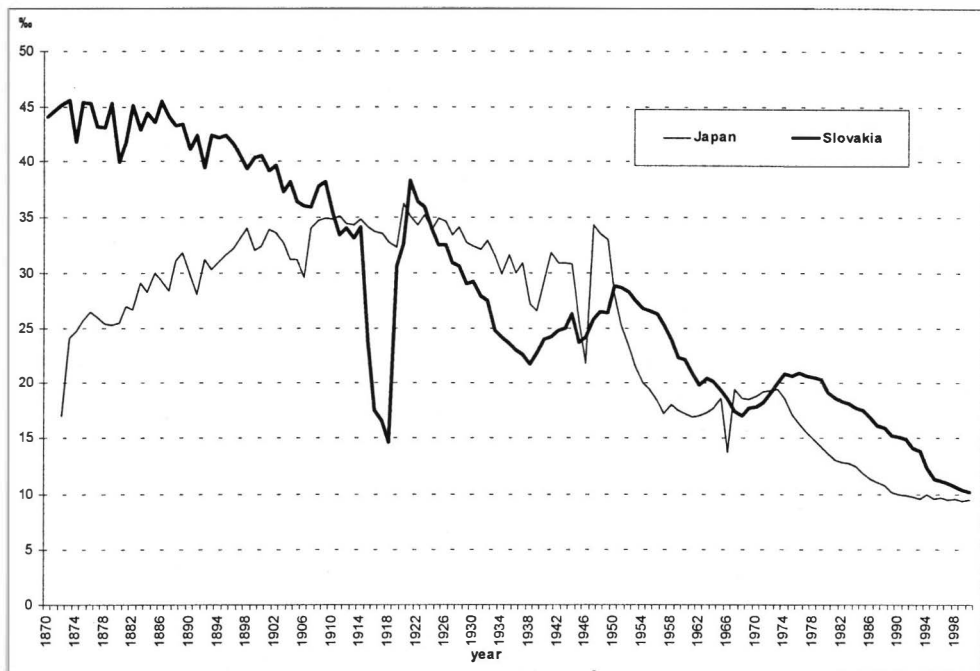


Figure 1 Development of the crude birth rate in Slovakia and in Japan (1870 – 2000)

level, caused especially by the strengthened age groups born during the high birth rate after the World War I, which reached the reproduction age. The compensation stage was manifested more distinctly in the Japan population, also the start was more rapid. The top had been achieved in the year 1947 with the value 34.3‰, by which it distinctly skipped over the pre-war values and approached to the level of the compensation stage after the World War I. In Slovakia the start of the compensation stage had been achieved only after the coup d'état in the year 1948 (in the year 1951 with maximum value 28.7‰).

After the fade away of the compensation stage in both countries followed the decrease of the natality connected with distinct changes in the society development. While in the SR this change had been marked by the start of communism, in Japan it handled primarily about the reform of the classic empire and the transition to capitalism connected with the start of the new social standards. In both countries these changes manifested themselves in the reproduction behaviour of the population. Different was also the population policy in both states. While in the socialist countries the urge had been to keep the birth rate level, in Japan similarly as in the West European countries the social policy steered more towards decreasing the birth rate in the spirit of the family planning.

In Slovakia the decrease of the birth rate had been gradual, affected by its short-time increase during the 70-ties, by conditioned shift of the strong after-war age groups to the reproduction age as well as by the pro-natality policy making more beneficial the entry into marriage and foundation of a family. Speciality of the natality development in the SR is the acceleration of the decrease of the absolute number of living born as well as of the crude

birth rate after the political-economic system changes in the year 1989. Since the year 1990 to 2000 the number of living born decreased from almost 80 thousand to 55 thousand and the crude birth rate from 15.1‰ to 10.2‰. The acceleration of the birth rate decrease is connected especially with the effect of the new social-economic conditions (Chapter 3).

In Japan after the fading away of the compensation stage of the World War II had been a very steep decrease of the birth rate up to the 16.9‰ in the year 1961, replaced by its slight increase in the 60s. To a further decrease comes since the half of the 70-ties to the half of the 80-ties and since this period it keeps the level around 10‰ (9.5‰ in the year 2000). Interesting is the year 1966 (similarly also the year 1906), when it came to a distinct decrease of the birth rate by 5‰ to the value 13.6‰ and in the following year it climbed again to the original level. This distinct population wave is related to the Chinese astrology, according to which it handles about the year of the „fire horse“, whereby the women born in this year are marked as deadly dangerous for men. The strong belief in astrology leads to a steep decrease of the birth rate in the effort to minimize the number of born girls in this year, who would have problems with their involvement into marital and reproduction life.

2.2 Development of the Total and General Fertility Rate

In Japan the total fertility rate achieved its maximum value (5.11) in the beginning of the tracked period in the year 1925 (Fig. 2). In the following period it decreased, but in the after-war period it comes to its increase of compensations character up to 4.54 in the year 1947. After the distinct compensation stage followed a steep decrease of the fertility rate, the reasons of which are in the social changes. The reform of the Empire and a number of changes connected with it reflected not only on the growing economy, but also in the sphere of the social life. In connection with the transition to the market economy began to assert a new style of life. These changes manifested themselves in the area of the population policy and of reproduction behaviour by propagating of the methods of planned family already in the 50s. To the new model rapidly adapted themselves in the first place the young pairs. The total fertility rate decreased and in connection with the education programme increased the age of mother at the first delivery. The decrease of the total fertility rate in the course of the 50s was very rapid. In the course of one decade it decreased from approximately 4.5 to the level lower than 2 (in the year 1961 it was 1.96). Into the fertile age began gradually to come the strong after-war age groups and the total fertility rate began slightly to increase. In the period 1963 – 74 it kept nearly at the retain level (2.1), by which Japan maintained the level of the natural reproduction.

In the middle of the 70s in Japan finished the period of the higher total fertility rate, which definitively decreased under 2.1 and never reached this level again. The period since 1975 is characteristic by the insufficient reproduction. The total fertility rate further decreased and at the beginning of the 80s achieved the value about 1.7, in the beginning of the 90s about 1.5 and in the year 1999 reached Japan up to now the lowest level of the total fertility rate 1.34 (in the year 2000 1.36). Also in the development of the total fertility rate we identify distinctly the „fire horse“ year 1966, when it decreased to 1.58 from the value 2.14 in the previous year and increased to 2.23 in the following year.

In Slovakia was the start of the compensation stage of the World War II slower, what could be connected also with the uncertain inner political situation in Czechoslovakia in the

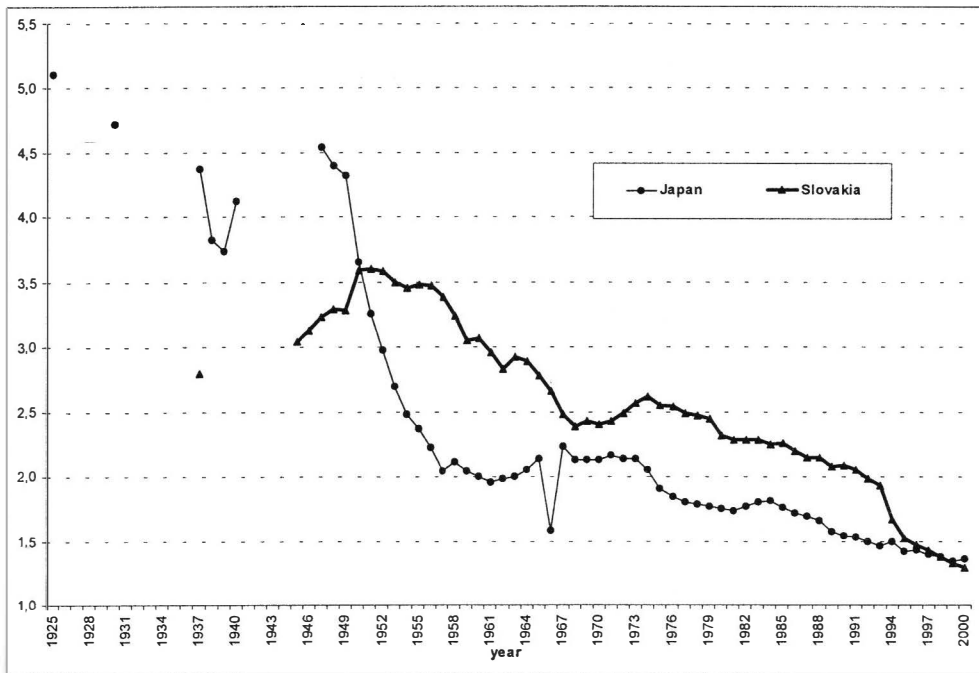


Figure 2 Development of the total fertility rate in Slovakia and in Japan (1925 – 2000)

after-war years, whereby the total fertility rate reached the top in the year 1950 by the value 3.47. Since this year followed a slow decrease of the total fertility rate. Under the value 3 it got the first time in the year 1961 (2.96) and under 2.5 in the year 1967 (2.48). In the development of the total fertility rate is presented also the following increase in the middle of the 70s, when the total fertility rate ranged about 2.5. The reason had been especially the shift of the strong after-war age groups into the fertile age and the pro-natal policy of the state. In the course of the 80s continued the slow decrease of the total fertility rate and to the year 1989 decreased it to 2.08, that it is got the first time under the limit of the population loss of the inhabitants (2.1). Up to this period had been for the population of the SR typical the expanded reproduction and the dynamical growth of the population by the natural movement.

For the population of the SR represented the 90s a period of dynamical changes. The total fertility rate steeply decreased and under the value 1.5 it got the first time in the year 1996 (1.47). Historically lowest value of the total fertility rate 1.29 reached SR in the year 2000, what is lower level as in Japan in this year. To the decrease of the total fertility rate in the 90s comes also despite the decrease of the level of the induced abortion and favourable age structure of women connected with the shift of the strong generations of women born in the 70s into the reproduction age. The explanation can be in the postponing of the deliveries to the higher age.

The development of the general fertility rate of Japan and Slovakia is analogical with the development of the total fertility rate. The general fertility rate of Japan women reached

the highest level in the beginning of the observed period (147.8‰). Up to the beginning of the 40s it decreased to 120‰. The compensation of the World War II manifested itself by the increase to 133.3‰. It followed a steep decrease to 63.8‰ in the beginning of the 60s. Up to the end of the 70s the general fertility rate maintained at the level 65‰. In this period it came to a further decrease to 40‰ in the year 1990 and around this value it ranged also up to the recent time.

In Slovakia was the general fertility rate 87.2‰ in the year 1945. In its development are presented, equally as with total fertility rate two maxima in the beginning of the 50s, when it reached the value around 108‰ and in the middle of 70s, when it reached roughly 82‰. Except for these two short-time increases of the general fertility rate we observe its decrease, which was the most steep in the 90s, when it decreased from the level 60.2‰ in the year 1990 to 38.0‰ in the year 2000, whereby it got under the level of the general fertility rate in Japan.

2.3 Development of the Age Specific Fertility Rate

In the both observed states is with the decrease of the total fertility rate connected also the decrease of the specific fertility rate of women, which we observe in all age categories, though the intensity of this decrease was in individual categories different. The differences between the SR and Japan are especially in the intensity of the decrease of the fertility rate in the corresponding age categories, as well as in the reached level of fertility rate in these categories in the individual time periods. With the differences in the level and intensity of the decrease of the specific fertility rate is connected also the difference in age, in which is achieved the maximum fertility rate. The age of the maximum fertility rate and its changes in the time are though evaluated in this chapter, as the inevitable part of the age specific fertility rate analysis, though it handles about a characteristic with an increasing development trend.

The basic picture about the fertility rate by age provides the specific fertility rate by 5-years age categories. On the bases of this indicator comes in Japan in the 50s to a distinct decrease of the fertility rate in all age categories, to the most distinct however in the categories 30 – 34 and 35 – 39 years, in which the fertility rate decreased in the last 10-years period by more than 2/3 of the values (Fig. 3). The smallest changes recorded the marginal age categories (15 – 19 and 45 – 49), in which however the fertility rate reached negligible low values already in this period (under 10‰), in difference to the SR, where up to the end of the 80s the fertility rate of the 15 – 19 years old had been maintained on relatively high level (around 50‰) and it began to decrease only in the 90s. The further period of steep changes of the specific fertility rate in Japan begins since the year 1980, when however most distinctly decreases the fertility rate in the lower age categories (25 – 29 and 20 – 24). On the contrary the fertility rate of women 30 – 34 and 35 – 39 years old recorded a slight growth, what testifies about the shift of deliveries to the higher age already since the beginning of the 80s, what is earlier as in the SR.

In Slovakia after the World War II up to the end of the 80s the greatest decrease of the fertility rate recorded the women categories 30 – 34 and 35 – 39 years old, equally as in Japan by more than 2/3 of the values, but in the SR this drop did not occur during one, but during three decades. The smallest changes in fertility rate were recorded in the category of

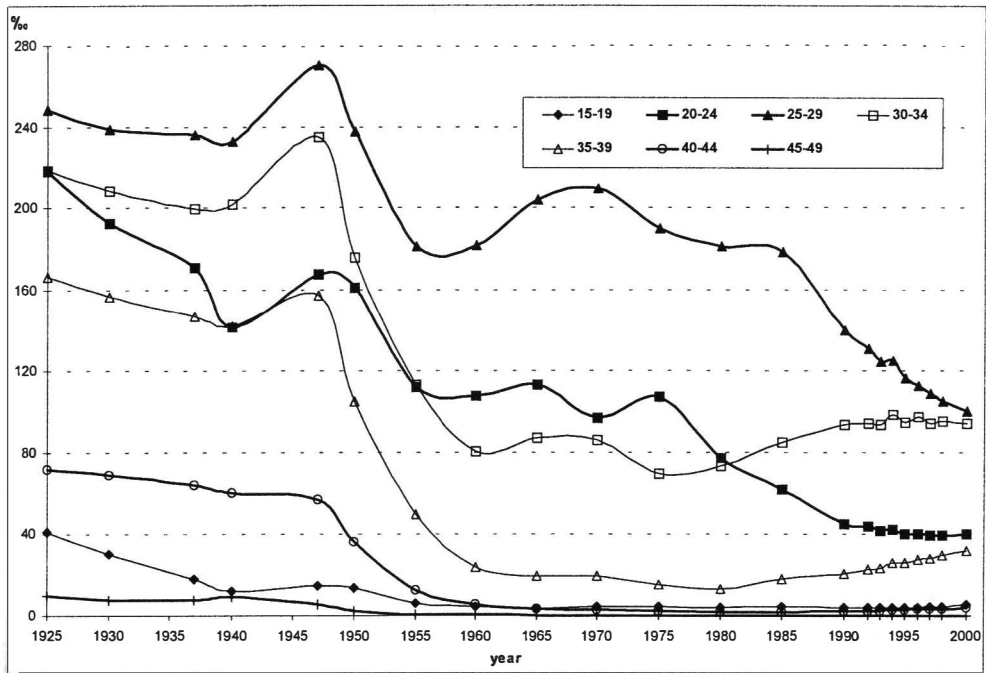


Figure 3 Development of the age specific fertility rate by 5-years categories in Japan (1925 – 2000)

15 – 19 years old, which still in the 50s reached nearly 1/3 of the level of the fertility rate of the 30 – 34 years old and by the end of the 80s was the fertility rate of both nearly equal, thanks to the already mentioned distinct decrease of the fertility rate of the 30 – 34 years old women (Fig. 4). In the 90s the greatest decrease of the fertility rate recorded the women categories up to the 29 years (especially the category of 20 – 24), which attests the postponing of the first child birth into the higher age. Women in the higher fertile age (from 30 years up) with low level of fertility rate, show the smallest decrease of the fertility rate, because they recorded the steep decrease already in the previous period.

In Japan is traditionally the highest fertility rate reached in the category 25 – 29 years and the second highest in the age 30 – 34 years (Fig. 3), which are higher categories as in the SR. The difference in the fertility rate in the mentioned two categories is steadily diminishing, whereby the acceleration of the decrease of this difference begins since the 80s as the consequence of the fertility rate growth in the age 30 – 34 years. While to the end of the 50s the difference in fertility rate of 25 – 29 and 30 – 34 years old was roughly 100‰, in the year 2000 was it only 5.9‰.

In Slovakia unlike the Japan, was since the end of the 50s up to the end of the 80s the greatest fertility rate reached at women 20 – 24 years old (Fig. 4). That was connected with a high employment rate of women, with a low average age of engaged pairs and with the conception of the young marriages about the advantage of the early birth of the first and the another children. The second highest fertility rate was in the category 25 – 29 years. The difference between the fertility rate level of these two categories had been in the 90s

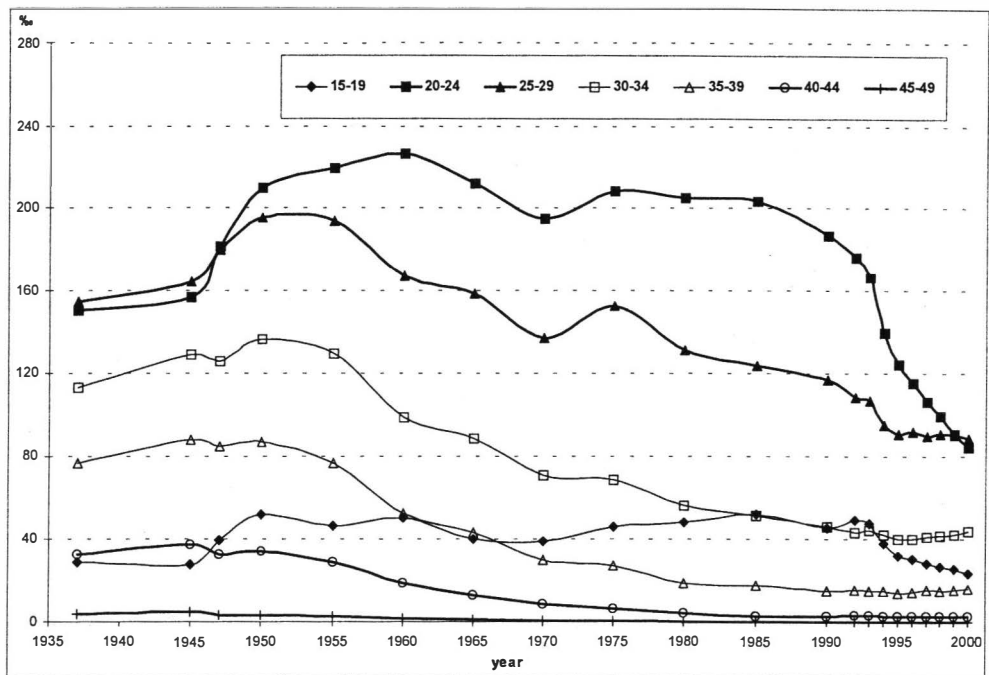


Figure 4 Development of the age specific fertility rate by 5-years categories in Slovakia (1937 – 2000)

diminished and in the year 2000 for the first time the fertility rate level in the age 25 – 29 years reached a higher level. Even if it comes to the decrease of the annual numbers of the living born to the women in the mentioned two categories, their proportion in the total annual number of living born is continually roughly 70%.

Also by 1-year age categories will be approved the basic difference between the SR and Japan in the development trend of the specific fertility rate. While Japan recorded a distinct decrease of the fertility rate in all age categories in the decade of 50s, the specific fertility of the Slovak women did not decrease as distinctly in this short period, but decreased more slowly up to the end of the 80s. (Fig. 5, 6).

In the period after the World War II up to the end of the 80s in both countries distinctly decreased the specific fertility rate in the higher age categories, whereby more distinct was the decrease in Japan, where these categories had also higher fertility rate. In Japan came it to a distinct decrease of the fertility rate also in the lower age categories (up to 25 years), but in the SR are these categories continually strong. While in Japan is the fertility rate of the 18 and 19 years old women minimal and is ranging around 10‰ in the last few years, in the SR is the fertility rate of the 18 years old 70‰ and of the 19 years old up to more than 140‰. Similarly it is in the lower categories. On the contrary the fertility rate of the 28 years old women and older in Japan is higher as in the SR, what is connected with the distribution of the categories with the highest fertility rate. While in the SR the maximum fertility rate was reached since the 50s up to the end of the 80s in the age categories 21 – 23 years, in Japan came it to a distinct shift of the age of the maximum

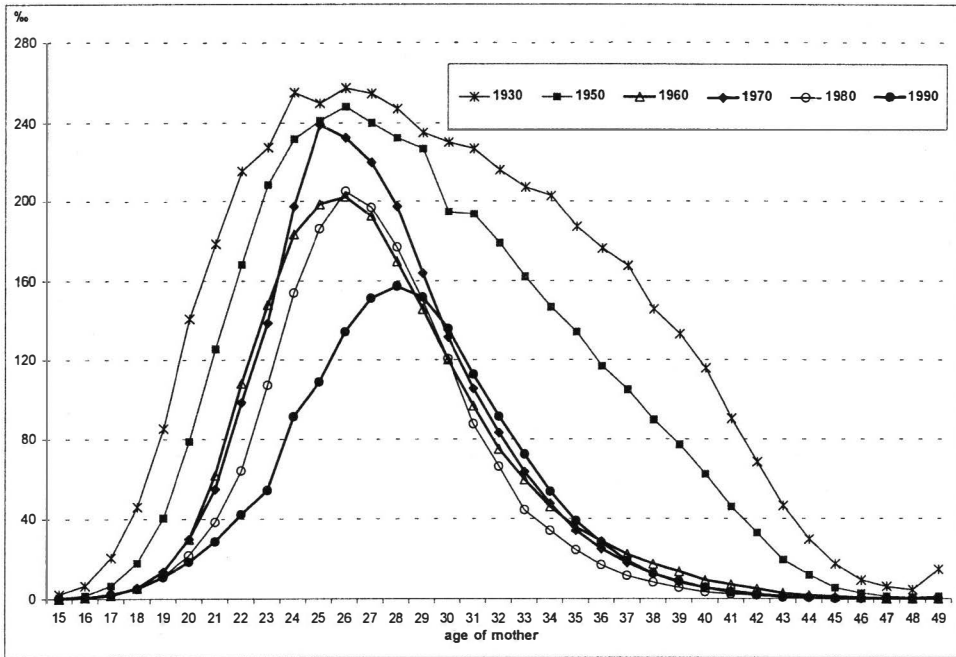


Figure 5 Development of the age specific fertility rate by 1-year categories in Japan (1930 – 1990)

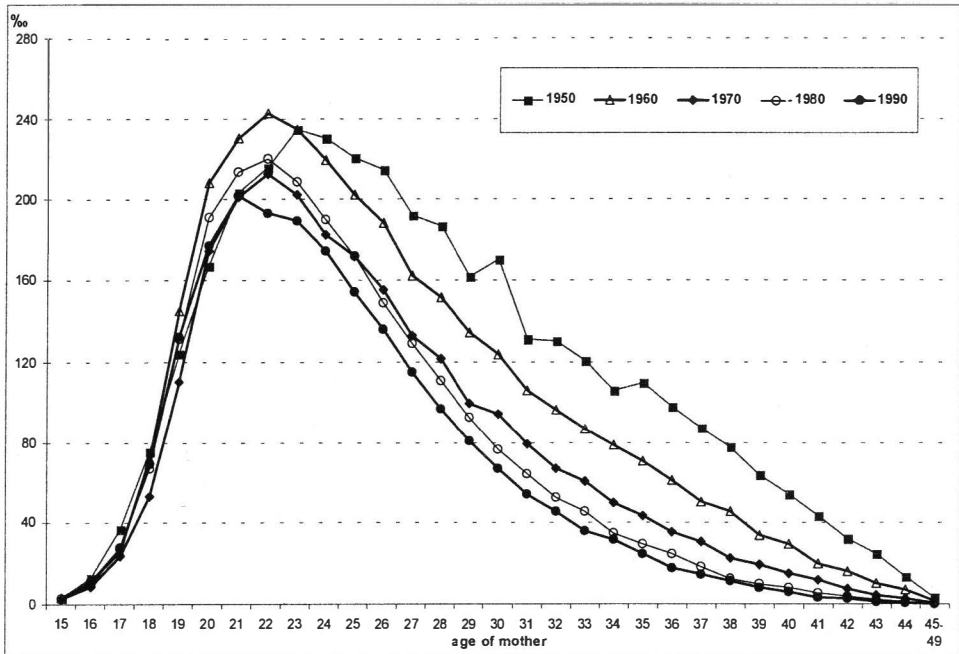


Figure 6 Development of the age specific fertility rate by 1-year categories in Slovakia (1950 – 1990)

fertility rate, with which is connected also the increase of the average age of the mother at the birth of child. While in the years 1950 – 1980 the fertility rate had been the highest in the age of 24 – 26 years, in the year 1990 till in the age of 28.

The development of the specific fertility in the 90s had been dynamical especially in the SR. It comes to a distinct shift of the maximum fertility rate age, which had been shifted since the year 1990 to the year 2000 in the SR from 21 to 25 years, while in Japan from 28 to 29 years. At the same time comes to distinct changes in the level of the specific fertility rate. Still in the year 1990 the specific fertility rate in the SR distinctly overpassed the specific fertility rate of Japan, in the age of maximum fertility rate up to 50%. In the course of the 90s however came to a distinct decrease of the specific fertility rate of the Slovak women in all age categories distinctly under the level of Japan. The specific fertility rate in the SR had most distinctly decreased in the most fertile age categories (from 19 to 26 years) and in the year 2000 the maximum fertility rate reached the level 100‰ (against the 200‰ in the year 1990). The specific fertility rate of the Japan women continues in the previous trend – it is decreasing in all categories, above all in the lower ones. The maximum fertility rate decreased since the year 1990 to the year 2000 roughly from the level of 160‰ to 120‰ (Fig. 7).

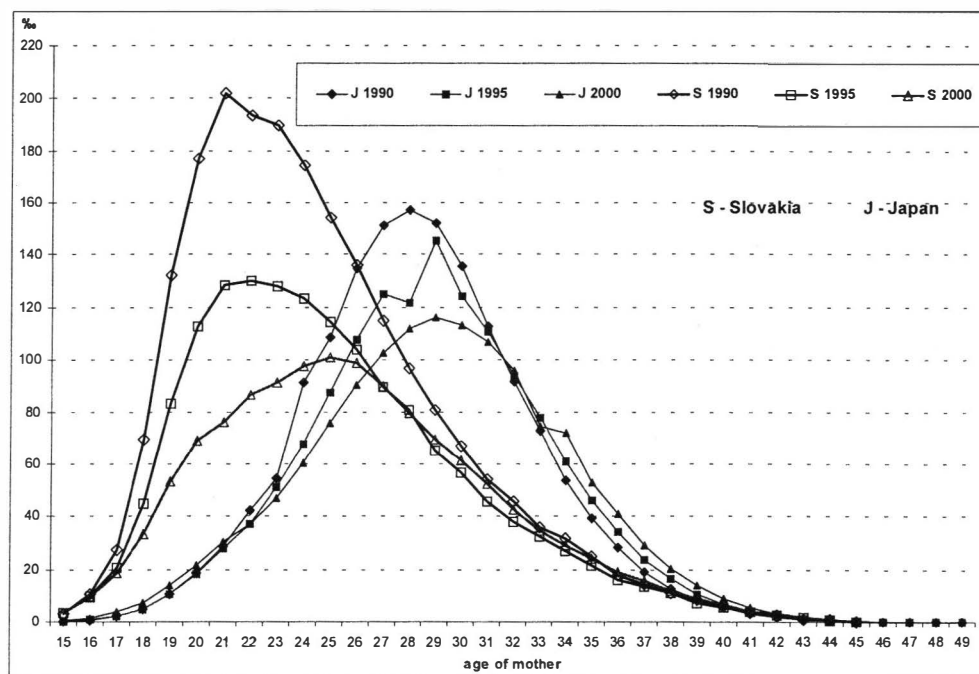


Figure 7 Development of the age specific fertility rate by 1-year categories in Slovakia and in Japan (1990 – 2000)

3. DEVELOPMENT OF THE NATALITY INDICATORS OF THE GROWING TREND

3.1 Development of the Average Age of the Woman at the Birth of the First Child

The average age of the woman at the birth of the first child does not depend as much on the immediate fluctuations as the measures derived from the number of the living born children. To the change of its level have influence the deeper transformations of the reproduction behaviour.

The high level of the total fertility rate in the period before the World War II in Japan suggests that the average age of the woman had been low at the birth of the first child and ranged 20 – 24 years. In the course of Empire transformation after the World War II influenced by the population policy aimed at the family planning and also as the consequence of the education programme, when the access to higher education had been made possible to all population, the average age of the woman at the birth of the first child increased. Since the 80s this indicator had overpassed the limit 26 years and in the following period continually increased. It may be attributed to the economic activity, education and emancipation of the Japan women. The increasing of the average age at the birth of the first child has been continuous, over 27 years surpassed it for the first time in the year 1990 and in the year 2000 reached roughly 28 years.

From the long-term perspective the average age of the woman in the SR at the birth of the first child changes relatively slowly. Since the beginning of the 50s up to the end of the 60s it decreased roughly by 1 year from the level 23.2 years. It follows a period of stagnation, respectively of slow increase of this value up to the end of the 80s. Only in the 90s begins a more distinct increase by two years. In the year 2000 reached the average age of the woman at the birth of the first child 23.9 years (in the year 1990 it was 21.9), which was as compared with the year 1950 more by nearly a year. Despite the growth of the observed indicator in the recent years is its level continually relatively low.

The average age of the first-time expectant mother in the SR is considerably falling behind the Japan level. The difference of the values of the woman average age at the birth of the first child in Japan and Slovakia began though in the recent period to reduce, but continually it exceeds 4 years. In the years 1993 – 1996 it was even more than 5 years. While we can rank Japan to the countries with the highest average age of the first-time expectant mother in the world, Slovakia is ranking in the European framework to the countries with the lowest level of this age.

3.2 Development of the Coefficient of Extramarital Births

The importance of the alternative forms of the family coexistence did not manifest more significantly in the SR up to the end of the 80s, only since the beginning of the 90s extend the cohabitations and the connected extramarital births. The cohabitation acquired more general extension as the pre-marital coexistence, but ever more frequently stay the partners in such a tie also after the birth of the child. Up to the end of 80s the proportion of

the children born beyond the marriage from the total number of born did not exceed 8%, despite the fact, that the unmarried mothers could use some advantages (extra social benefits, preference at placing of children into nurseries and kindergartens). All these relative advantages were after the year 1989 canceled, but the proportion of the born beyond of the marriage increased. Already in the year 1991 it reached the value roughly 9% and until the year 2000 increased to more than 18%. With this rapid growth of the coefficient of extramarital births is however not connected a distinct increase of the number of births beyond the marriage, but this increase is rather connected with the distinct decrease of the number of born. The proportion of the children born beyond the marriage in the SR is however relatively low as compared with other states of Europe, where in several are born beyond the marriage more than 50% of children (Sweden, Island, Estonia and others).

While the cohabitations and births beyond the marriage dramatically increased in the West Europe already since the 70s, in Japan was their growth insignificant. Cohabitations are in Japan nowadays negligible as well as the proportion of the born beyond the marriage, which does not exceed 1.5%. The bond between the natality and the nuptiality is in Japan very strong, therefore the growth of the proportion of the singles, respectively the growth of the population proportion who never solemnize marriage and the shift of the enter into marriage into the higher age unambiguously are condition of the decrease of the birth rate and fertility rate. (Atoh, M., 1994, 2000). The reasons of the mentioned slow growth of cohabitations and extramarital births in Japan in the last quarter of the 20th century are as follows (Atoh, M., 2001):

1. Expansion of the modern contraception methods is very weak, what is also connected with the legal limitations in the background of which is the conservative attitude connected with the preference of the traditional family behaviour. The pre-marital sex and cohabitation become this way a great risk of the unintentional pregnancy and of delivery, which are accompanied by the break up of the studies, or of the occupation as well as of the working career of the woman.
2. Japanese women are emancipating socially and economic, but these changes do not bring a distinct increase of the number of cohabitations. That is connected with their conservative attitude to the sex and contraception, but also with the continually enduring presumption of the traditional division of the „roles“ according to the sex (man – breadwinner, woman – homemaker) as with marriage pairs so with cohabitating.
3. Secularization and the individualism continue very progressively in the after-war Japan, but the individualism is not recording such development as the fall of the traditional attitude to the family. The fact is, that the proportion of the single working women in the age around 30 years, which live at their parents is relatively high, the reason of which is the convenience and economic advantage of such coexistence.

4. FACTORS OF THE NATALITY AND FERTILITY INDICATORS DEVELOPMENT

The most significant changes of the natality and fertility in the SR began in the 90s of the 20th century, whereby they are connected with the changes in the demographic behaviour, which is the result of the influence of a great complex of social and individual factors. Above all it comes to changes in the value orientation of the population, to the growth of the individualism and emancipation of women, which is manifested by the decrease of the value of the marriage rate connected with the shift of the entry into the marriage to a higher age. At the same time continues the secularization of the society, what is also leading to the weakening of the traditional demographic behaviour. An important role are playing also the changes in the economic situation, growth of the costs connected with the care for the child, temporary decrease of real incomes of the households, but also the change of the social situation of the young people, financial inaccessibility of the flats, the danger of unemployment, the new social policy towards the families (reducing of the newlyweds loans, regulation of the family allowances) and the like. Every economic recession, shock, lowering of the real incomes, every increase of costs means the decrease of the birth rate. On the other hand increase of the income increases the birth rate only in exceptional cases (Pastor, K., 2000). It is impossible to forget the economic factors leading to the decrease of the levels of birth rate and fertility rates in the SR, among which without any doubts belong the broader offer of the possibilities of the selfrealization of the young people (prolongation of the preparation period for the occupation, possibility of the studies abroad, broadening of the entrepreneurial options and the like).

The factors conditioning the continuing process (since the 70s) of the basic indicators of the natality and fertility (Chapter 1) in Japan can be divided to direct – demographic and indirect – social-economic (Atoh, M., 2000). The main demographic factor is the distinct decrease of the proportion of the married women in the reproduction age. Regarding to the fact, that the coefficient of extramarital births is in Japan negligible, the increase of the proportion of the singles is distinctly conditioning the decrease of the fertility rate. Additional direct factors are the increasing of the average age of the engaged pairs at the marriage and the increasing of the average woman age at the birth of child, above all at the first one. With the postponing of the deliveries is connected a rapid decrease of the fertility rate especially in the age categories 20 – 24 and 25 – 29 years and similarly with the postponing of the marriages is connected a rapid decrease of the proportion of the married women in the age 25 – 29 and 30 – 34 years (Nakagawa, S., 2002). On the other hand the distinct extending of the contraceptive methods and means and the legalization of the induced abortions did not distinctly affect the fertility rate in Japan, despite the fact, that the legal induced abortion has been accessible already since the 40s (Atoh, M., 1994).

The social and economic background for the decrease of the fertility in Japan is more-less related with those in the West European countries. Japan has been since the middle of the 70s transformed to a highly consuming society, following after the period of high economic growth. The main socio-economic factors of the decrease of the fertility can be summed up into following points (Atoh, M., 2000):

1. In the connection with the change of the position of the woman in the society, respectively in the family, women's participation in economic activities, the proportion

of women with higher education and the representation of women at higher posts are increased, the differences between the wage level of men and women is reduced. The greater chance of women to grow in the economic area, to increase the salary and to make the career gives them a greater economic independence.¹

2. As the consequence of the distinct economic growth comes to the change of the value system of the young people, to the growth of individualism and secularization of the society, which subsequently condition the widening of the „consume“ activities among the young people, leading to the shift of the deliveries and weddings into the higher age and to the reduction of the number of children in families.
3. Continually is accepted the division of the „roles“ according to the sex. The society however does not form for the woman the option to continue in the job also during the care for the child and the social support is not optimal. At the same time the attendance of the men in the care for the household and children is extremely low. Therefore comes at the women to the prolongation of the average length of the occupation of the singles, decrease of the number of leaving from the occupation for the reason of wedding and delivery, continually more frequently to the preference of the career before the family and children.
4. In the long-term development comes to the changes in the value of the child and of the height of costs of the child care for the parents. Limiting factor of the number of children becomes the cost height for the child care and the ensurance of his education, which are increasing, therefore the child means the economic disadvantage, economic burden.
5. The specific factor is based on the model of the wedding behaviour. Despite the fact, that the young people prefer the „weddings from love“, they are not able to escape the model of the wedding behaviour from the past, when the majority of weddings was mediated by the parents, respectively by other adults. Such a model had been supported by the state, because for lawfull they had been recognized only with the consent of parents, which had been changed only after the World War II in connection with the change of the Civil Law.

5. CONCLUSION

1. Despite the considerable differences in the socio-economic, political, cultural etc., characteristics in the SR and Japan there exist several common features of the development of the basic population process – natality. The natality indicators can be divided into two groups, according to the long-term development, identical in both countries.

The first group form the indicators, which record in the time the falling trend, e.g. the crude birth rate, total fertility rate, general fertility rate, age specific fertility rate. The fall of the level of this indicator group is however not linear in any of the observed countries, but they are affected by several periods of the increased, respectively distinctly decreased level.

¹ The landmark in the change of the woman position and of the statute of the woman in the society was the after-war Code of Laws, which introduced the legal equality of the sexes in the society and in the family (Atoh, M., 1994).

Such affect of the linear trend common for both countries is the application of the demographic law of the war, which can be documented by the steep decrease of the indicators during the World War II (destruction stage) and on the contrary by their increase after the end of the war period (compensation stage).

The second group form the indicators recording in the time the growing trend e.g. the average age of the woman at the birth of the child, respectively of the first child and connected with them the age at which had been reached the maximum fertility rate. It handles about indicators which do not subject to immediate fluctuations in time like the indicators of the first group. To their changes affect the deeper transformations of the reproduction behaviour of the population, therefore their changes in the observed countries are not so dynamic, as it was in the case of the first indicator group.

Besides the common trend of the natality and fertility indicators development we follow in the recent time at several indicators, especially in the first group (e.g. the crude birth rate, total fertility rate, general fertility rate, specific fertility rate in the age categories from 40 years up), roughly the same level in Japan and in the SR, though the level at the beginning of the followed period and the course of the development they were different.

2. Between Slovakia and Japan however exist in the long-term development of the natality and fertility indicators also considerable differencies:

- The basic difference is the fact, that several indicators as the crude birth rate, general fertility rate, specific fertility rate by age (that is indicators of the first group with a falling trend) got in Japan equally as in the West European countries to a relatively low level already in a much earlier period (in the 60s respectively 70s of the 20th century), while in the SR recorded these indicators a steep fall only in the 90s equally as in other postsocialist countries.
- Besides the velocity of the development of the individual natality indicators (with falling and also growing trend) in time, we are identifying the difference between the SR and Japan also in the intensity of this development. Generally can be stated that the development in Japan was in the majority of indicators more fluent, more gradual but in the SR several indicators recorded steep changes in a short period of the last decennium. As an example can be mentioned the total fertility rate, which in the course of the 90s had fallen in the SR roughly from the retain level (2.1) to the present 1.3, which is roughly the equal level as in Japan, but there it reached in the beginning of the 90s the level 1.5.
- Another difference is the steep growth of the proportion of the born beyond the marriage in connection with the growing cohabitations in the last decade in the SR unlike Japan, where the coefficient of extramarital births maintains already for half century the equal very low level, respectively is growing very unexpressively. The present 18% proportion of the born beyond the marriage in the SR and the 1.5% in Japan are proof of it.
- We follow differences also in the level of several indicators in time, which endure up to the present time. In difference to such indicators as the crude birth rate, total fertility rate, general fertility rate, which are presently reaching roughly equal level in both countries, we observe considerable differencies in the indicators level as the average age of the woman at the child birth, respectively of the first child, the age at which is reached the maximum fertility. All these indicators reach substantially higher level in Japan, whereby in the present time it handles about roughly the difference of 4 years as compared to the SR.

3. The natality development is influenced by a number of general factors as economic, political, social, cultural development which are recording a number of differences between the followed countries and the reflection of which is also the demographic behaviour of the population, their attitude towards the marriage and parenthood, where we can follow considerable differences. The changes in the level of the mentioned first group of the natality and fertility indicators with falling trend are conditioned in both countries by a complex of changes either social-economic or also individual and demographic.

From the point of view of the first factors group we are following the basic difference between the SR and Japan, which is the fact, that the distinct decrease of the natality in Japan will be connected with the economic growth, similarly as in the West European countries. On the contrary in Slovakia it comes to considerable changes not only in the natality and fertility but also in all of the reproduction behaviour in the period of the society transformation in the 90s of the 20th century, when it comes to negative changes in the economic situation. In this connection the main socio-economic factors of the natality fall in these countries are different. In Slovakia can be ranked to them the growth of the costs connected with the care for child, fall of the real incomes of the households, financial inaccessibility of flats, reduction of the newlyweds loans, regulation of the family allowances and so on. In Japan it is the change in the position of the woman in the society and in the family, changes in the „value of the child“, which becomes an economic burden.

The group of individual factors is represented by the value orientation of the people, by the growth of the individualism and of the women emancipation, secularization and similarly, which are common for both states.

For Japan are characteristic still specific factors of the natality decrease connected with the traditions. It handles about the enduring of the traditional wedding behavior as well as acceptance of the role division according to the sex of partners in the family and in the society, which makes difficult the ranking of the woman-mother into the economic life of the society. Particularly these factors also share on the low level of the coefficient of extramarital births.

Concomitant phenomena of the changes of the demographic behaviour are also the increase of the average age of the engaged pairs at the marriage, the average age of the woman at the delivery, especially at the first, decrease of the proportion of the married women in the reproduction age, which however did not change in the time in the SR as distinctly as in Japan, but they can be considered as important demographic factors of the decrease of the first group of the natality and fertility indicators.

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Resume

Pôrodnosť a plodnosť obyvateľstva – komparatívna analýza Japonska a Slovenska

V dlhodobých tendenciách pôrodnosti sledujeme v Japonsku i v SR viaceré podobnosti, napriek značným rozdielom v socio-ekonomických, politických, kultúrnych atď. charakteristikách týchto krajín. Základná podobnosť je vo vývojových trendoch ukazovateľov tohto procesu. Ukazovatele ako hrubá miera pôrodnosti, úhrnná plodnosť, všeobecná plodnosť, špecifická plodnosť podľa veku zaznamenávajú v čase v oboch krajinách klesajúci trend a napr. priemerný vek ženy pri narodení dieťaťa, resp. prvého dieťaťa a vek, v ktorom je dosahovaná maximálna plodnosť naopak rastúci trend. Súčasne popri spoločnom vývojovom trende sledujeme najmä u ukazovateľov s klesajúcim trendom v súčasnosti v oboch krajinách približne rovnakú úroveň.

Medzi sledovanými krajinami však vo vývoji procesu pôrodnosti existuje množstvo rozdielov, z ktorých základnými sú rozdiely v intenzite a rýchlosti zmien jednotlivých ukazovateľov tohto procesu v čase. V prípade väčšiny ukazovateľov klesajúceho trendu bol vývoj v Japonsku plynulejší a už v skoršom období sa dostali na relatívne nízku úroveň, zatiaľ čo v SR zaznamenali prudký pokles len v poslednom decéniu. Čo sa týka skupiny ukazovateľov rastúceho trendu, hlavný rozdiel medzi sledovanými štátmi je v ich úrovni, ktorá je v celom období u väčšiny z nich podstatne vyššia v Japonsku. Osobitné postavenie má koeficient mimomanželskej pôrodnosti, ktorý prudko narastá najmä v poslednom decéniu v SR, no v Japonsku sa udržuje už pol storočia na rovnakej veľmi nízkej úrovni.

Zmeny v úrovni ukazovateľov pôrodnosti a plodnosti klesajúceho trendu sú podmienené komplexom zmien sociálno-ekonomických, individuálnych a demografických. Z hľadiska sociálno-ekonomických faktorov je základný rozdiel medzi SR a Japonskom v tom, že výrazný pokles pôrodnosti v Japonsku sa spája s ekonomickým rastom, zatiaľ čo v SR sa spája s úpadkom ekonomickej situácie v 90. rokoch 20. stor. Skupina individuálnych faktorov je naopak veľmi podobná v oboch krajinách, charakterizujú ju zmeny v hodnotovej orientácii ľudí, rast individualizmu, emancipácie, sekularizácia a i. Špecifické pre Japonsko sú faktory súvisiace s tradíciami a to pretrvávanie tradičného sobášneho správania a rozdelenia úloh podľa pohlaví v rodine. Nárast priemerného veku snúbencov pri sobáši a ženy pri pôrode, resp. pri prvom pôrode, pokles podielu vydatých žien reprodukčného veku, možno označiť ako demografické faktory poklesu pôrodnosti, ktoré sa však v SR nemenili v čase tak výrazne ako v Japonsku.

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出生に関するスロバキアと日本の比較研究

ヤナ・マレンチャーコヴァー

スロバキアと日本は政治的にも社会経済的にも、また文化的にもかなりの違いがあるが、長期的にみた出生の動向にはいくつかの類似点がある。さまざまな指標によってみた出生率（普通出生率、年齢別出生率、合計特殊出生率など）はいずれの国でも低下傾向にある。他方、第1子出生時の母の平均年齢、年齢別出生率が最大になる年齢などはスロバキアでも日本でも上昇している。また、この2カ国の普通出生率、合計特殊出生率は現在ほぼ同じ値となっている。

しかしながら、両国の出生動向には違いも観察できる。上記で共通点として指摘した出生率の低下傾向であるが、日本における低下は相対的に緩やかであるのに対し、スロバキアでの出生率低下はこの10年に急速に進行した。出産年齢に関しては両国で上昇しつつあるが、両者を比較すると、日本の方がかなり高い値を示している。婚外子の出生率については、現在スロバキアで急速に上昇し、かなり高い値となっているが、日本では半世紀にわたり極めて低い状況が続いている。

両国における出生率低下の要因は社会経済的状况、個々の意志決定など様々な要素が複雑に組み合わさったものと考えることができる。出生率低下をめぐる社会経済的状况はスロバキアと日本で大きく異なる。日本では経済の好況が出生率低下をもたらしたのに対し、スロバキアの出生率低下は1990年代の厳しい経済状況と結びついている。個々の意志決定については両国に共通性がみられる。いずれの国においても個人主義、女性解放(emancipation)、世俗化(secularization)といった面での価値観の変化が生じている。日本については、離婚の増加や伝統的な性別役割分担からの解放が指摘できる。平均初婚年齢の上昇、第1子出生時の母の平均年齢上昇は人口学的にみた出生率低下の要因に含まれるが、スロバキアにおける変化は日本ほど顕著ではない。