

# Fertility Behaviour of Highly Educated People in Slovenia<sup>1</sup>

**NADA STROPNIK**

Senior Researcher at the Institute for Economic Research, stropnikn@ier.si

## Abstract

This paper addresses the fertility behaviour of the highly educated people in Slovenia, aged 20-49 years. It is mostly based on the data of a survey conducted in the year 2000. A descriptive statistical analysis was used. In particular, conclusions were drawn as to what could be the impact of new or changed family policy measures. Agreeing with the statement that the implementation of three most desirable measures would have a certain positive impact on deciding to have a(nother) child decreases the more the statements given are binding. Nonetheless, 45% of the highly educated declare that if their three most desired measures are implemented, they will probably decide to have a(nother) child. We compare the realized and the intended number of children of the highly educated and other educational population segments. The number of children the person still intends to have as a rule increases with the educational level irrespective of gender and age group. Some proposals are given for new emphases in Slovenian family policy with the purpose of making it easier for the highly educated to realize their intended number of children.

**KEYWORDS:** fertility, intended number of children, highly educated, attitudes, values, family policy

## Introduction

The remarkable drop in the fertility rate in numerous European countries in the 1970s as well as (also in Slovenia) in the 1980s and 1990s has given rise to several studies attempting to establish whether the increases in the educational level of women and their employment rate have negative impacts on the decrease in their fertility rate. There are two more reasons for focusing on the fertility of the highly educated. On the general level, the focus

---

<sup>1</sup> The financial support by the Ministry of Science and Technology and the Ministry of Labour, Family and Social Affairs of the Republic of Slovenia (contracts no. 3411-99-25 0656 and 3311-04-828953) is gratefully acknowledged. This paper is also an outcome of the project 'DIALOG - Population Policy Acceptance Study (PPAS): The Viewpoint of Citizens and Policy Actors Regarding the Management of Population Related Change' funded by the European Commission under the 5th Framework Programme, Contract No. HPSE-CT-2002-00153.

on the fertility behaviour of this segment of the population is important because the highly educated are carriers of changes in the overall society. Our interest in the issue was also evoked by the results of the Eurobarometer survey indicating that the more educated intend to have more children than the others (Heiland, Prskawetz and Sanderson 2005), and by the finding that there is a considerable difference in the intended and realized number of children of the highly educated.

Speaking in general, it still applies that the higher the educational level the lower the fertility (especially for women). Only recently the researchers started investigating whether there also has been a similar negative relationship between the educational level and intended fertility. As stated by Heiland et al. (2005), it can be expected that more educated persons are less inclined to the family life and that they wish to have small families as a result of greater opportunities in their professional careers and their financial independence. More educated women are relatively strongly committed to the labour market; what attracts them to it is not just their current income but also the fact that their jobs offer them some other kinds of satisfaction and pleasure. However, there is a possibility that higher education increases the individual's capacity and awareness of being able to provide for and raise children, which may be the reason for preferring large families. Until now, research has not provided an answer to the question of whether the impact of the educational level on the fertility is the result of correlation between the educational level and preferences, or between educational level and constraints, or both.

The most frequently quoted reasons for lower fertility of the highly educated people compared to those with lower attained education are rising returns to human capital and improved access to the labour market as well as the use of more effective contraception (Heiland et al. 2005: 3). Other possible constraints are very likely related to reconciling their professional and family commitments, sharing household- and child-related duties between partners, prejudices and eventual obstacles in their environment (particularly the working one), objectively and subjectively enforced ways of living and similar.

In Slovenia, some of the subjective indicators have been covered by two research projects focusing on fertility. The first one was conducted in 1989 and the second one in the period from 1993 to 1999. The latter was implemented under the framework of the international *Fertility and Family Surveys (FFS)*<sup>2</sup> (Obersnel Kveder et al. 2001). One of its tasks was to establish whether there was any impact of the educational level on deciding to have the first child (Kožuh-Novak et al. 1998). It was found out that half of the women with high (i.e. above higher secondary) education born in the 1950s had their first child by the age of 24 (a delay of 3-4 years compared to the least educated women) while the ones born later had theirs at an even later age. The intergenerational differences were more expressed among women with high education than among those with the secondary or low education.

---

<sup>2</sup> This research was coordinated by the European Commission of the United Nations (<http://www.unece.org/ead/pau/ffs/>).

This paper's analysis is based on the Slovenian database from the year 2000, the 2005 international database of the DIALOG project (IPPAS) and the Slovenian Delphi Study conducted in 2003-2004. Upon presentation of the data and methods used, an overview of theories and research addressing the relationship between the high educational level and the fertility is provided, accompanied by a short contextual framework. Attitudes of Slovenes towards reconciliation of their professional lives and motherhood, attitudes of highly educated people towards population (regarding the size of the Slovenian population, family and children), and life values of this population segment are examined. Thereafter, an attempt is made to foresee the effect of either new or changed policy measures on the fertility behaviour of the highly educated population segment. A comparison between the realized and intended number of children of the highly educated and other educational groups of the Slovenian population follows. In the closing chapter, some proposals for new emphases in Slovenian family policy are given.

## The data and methods used

Both qualitative and quantitative research methods are used. The qualitative analysis was based on interviews conducted in the framework of the Delphi Study while the quantitative analysis was performed on the Slovenian data part of the international dataset, both described in the continuation of this chapter. The SPSS 10.0 statistical package was used for descriptive statistical analyses.

Within the framework of the research project *Population, Family and Welfare: Attitudes towards Policy and Measures*, we conducted a survey on a representative sample of 1,550 persons in Slovenia aged 20-64 years in the year 2000. It was focused on the attitudes towards fertility, children and family, family policy, gender roles, reconciliation of family and professional life, and generational solidarity (solidarity with families with children and the elderly). At the same time, the survey was a form of preparation for the second circle of the European research project PPA.<sup>3</sup> Under the European Union 5<sup>th</sup> Framework Programme, a research project entitled *Population Policy Acceptance Study: The Viewpoint of Citizens and Policy Actors Regarding the Management of Population Related Change – DIALOG* was implemented in 2003-2005. Based on national surveys, a common international database (the IPPAS database) was set up. It contains data for 14 European countries (Austria, Belgium-Flanders, Cyprus, the Czech Republic, Estonia, Finland, Italy, Lithuania, Hungary, Germany, the Netherlands, Poland, Romania and Slovenia).

For the purpose of this analysis, a Slovenian sub-sample of the IPPAS database was used including 1,119 persons aged 20-49 years. The bottom age is equal to the lowest age of the respondents whereas the upper age limit is approximately the biological age above which women relatively rarely give birth to children. In this age group, special attention was paid to the attitudes of the highly educated persons (those having attained

---

<sup>3</sup> This international project was based on the *Population-related Policy Acceptance and Attitude Survey (PPA)* which was in progress in 1990-1992 in nine European countries. The results are published in the books 'Population, Family, and Welfare: A Comparative Study of European Attitudes', Volume I (Moors and Palomba, eds. 1995) and Volume II (Palomba and Moors, eds. 1998).

more than the higher secondary education; 208 respondents). Besides this, findings of an analysis made on the overall Slovenian sample (persons aged 20-64 years) in terms of their attitudes towards reconciliation of the professional and family life are also presented (Stropnik and Černič Istenič 2001).

With the Delphi Study, performed under the DIALOG project in 2003-2004, we obtained attitudes towards various policies and measures regarding population ageing and the elderly, gender roles, and family and fertility. Fifteen panellists (nine women and six men), having distinguished themselves in their professional areas in Slovenia, were selected. The panellists, who were in general not experts for population issues, represented very different fields of activity and interest: family- and labour policy makers, entrepreneurs and their associations, lobbies and pressure groups, trade unions, journalists, churches, equal opportunities organisations, scientists, cultural workers and local administrative bodies. We conducted four interviews with each of the panellists.

### **Theories and research on the relationship between high educational level and fertility**

According to the two main economic theories of fertility, the reason for extremely low fertility is the increase in the educational level and employment of women. Becker's (1981) theory emphasizes the opportunity costs of childbearing. Becker and other followers of the New Household Economics explain the relationship between the attained educational level and setting up a family by the income effect and price effect. They believe that the former is decisive for men and the latter for women. More educated men have greater possibilities for higher income; this is why they are more capable of providing financially for their families and are more attractive as a future potential spouses, for which reason they will establish their families earlier than other men. This means that for men there is a positive relationship between the educational level and the time when they set up their families.

This is quite opposite with women. The decisive factor for them is the price element. The more educated – compared to those with less education – renounce a higher income when they decrease the number of their working hours or leave the labour market.

Easterlin's theory (1976) emphasizes the increase in the financial reward as a result of delayed parenthood. Women wish to complete their education and make themselves valued in their profession before deciding to form a family. The duration of education very much affects the age at which women give birth to their first child. This importantly affects intervals between births as well as the final number of children.

The negative relationship between the educational level of women and their fertility has, in the last 10-15 years, been discovered or reported on by numerous authors. The delayed birth of the first child is mostly attributed to engagement in education.<sup>4</sup> The final consequence is that, on average, women give birth to fewer children since with the increase in their age at childbearing (and particularly after the age of 37) the probability of getting pregnant diminishes. There are also some other reasons that prevent them from

---

<sup>4</sup> See the extensive literature overview in Liefbroer and Corijn (1999).

childbearing at their later age: divorce or breakdown of partnership, unemployment, promotion in the professional career (in case of low compatibility with maternity or a high number of children) and similar. Knudsen (1995) detected a clear pattern for women of fertile age in Denmark in the 1980s: the longer the duration of education, the higher the age at birth of first child and the lower the average number of children at given age. Though the intervals between the births were shorter for women who had their first child at a relatively advanced age, these women did not achieve the number of children of the women who had their first child at an earlier age.<sup>5</sup> Women occupying positions that demanded a long duration of education and a high commitment to their professions had high ages at birth of first child, the lowest average number of children, and the highest proportion without children (Knudsen 1995: 7).

Knudsen's (1995) findings regarding men were quite opposite to those regarding women. The men with more years of schooling and occupying better positions had a higher number of children and the smaller share of them were childless compared to those with less education and at lower positions. These men were married to women having had fewer years of schooling and with less demanding jobs or working part-time. When married to women of an educational level similar to theirs, more of them were childless.

Schultz (1994) also observed a positive relationship between the years of schooling of men and fertility rate. His assessments were based on the data for 68 low-income countries in the 1970s and 1980s.

Some of the studies (for instance Hoem and Hoem 1989; Kravdal 1992; Oláh 1996; Rønsen 1997) revealed that the more educated Swedish and Norwegian women have the second and third child more often than other women. This is quite surprising because these women tend to have strongly pronounced wishes to have successful professional careers. The authors speculate that the reason for such behaviour might be in the prestigious status of those having more children among the better-off population. Oláh also assumes that these women plan their education, employment and children simultaneously so that their decision regarding education does not precede that of having children.

Hoem et al. (2001) similarly quote research results from the end of the 1980s and the 1990s indicating that highly educated women in Sweden and the Great Britain had a third child more frequently than other women. That research found the reason for such behaviour was the financial situation of these women which made it easier for them to decide for a third child in spite of the factors against such decision.

The experts are not in unanimous agreement that it is self-evident that a higher level of individualism should result in lower fertility rates, and that the family life has a lower value for highly educated women than for other women. It is quite possible that the highly educated women are determined to realize their decision regarding the number of children even if this means a departure from social norms.

---

<sup>5</sup> Liefbroer in Corijn (1999: 46) quote some research from the 1980s and 1990s that discovered that the negative effect of educational level disappears with increasing age. This suggests that women with more education do not renounce maternity but just postpone it.

The first circle of the Austrian PPA survey also showed that the share of women having two children and wishing to have another child increases with their educational level (yet it is the highest for women with the attained lower secondary schooling) (Hoem et al. 2001). Based on this finding, Hoem et al. (2001) assume that highly educated women have their third child at least as frequently as other women. There are also some other arguments supporting their assumption. For instance, by having two children, the highly educated women have already exhibited a certain inclination to children. As their husband/partner is usually financially secure, these women in general enjoy greater possibilities and freedom of their social class to deviate from social norms.

In contrast, the results of the analysis based on the Austrian Family and Fertility Survey (1995-1996) showed a surprising absence of any direct relationship between the educational level of women and the decision to have the third child. For Hoem et al. (2001) this is an indication that the educational level of women affects the frequency of their having the third child only indirectly, i.e. through the age of these women at birth of first child. Unexpectedly, the impact of the educational level of women disappeared when the educational level of their husbands/partners was also taken into account. It seems that it is the latter that determines the rate of third births, which reflects the general power ratio in Austrian marriages.

Heiland et al. (2005) came to the conclusion that it is less likely for the more educated women in Germany to prefer having a childless family or a one-child family to a two-child family. The same applies for men and for different age groups of both genders (though the positive relationship is less explicit for the younger generations). Since this data shows a negative relationship between educational levels and actual fertility, the greatest difference (for the reason of the above-described newly established relationship) between the intended and realized fertility is among those with more education.

Castles (2003) analyzed fertility rates in 21 OECD countries in 1980 and 1998. He discovered that during this period, all observed variables (including tertiary education of women and their employment rate) changed the direction of their fertility impact. The impact of these two variables was negative in 1980 and positive in 1998 – but always statistically significant. At the end of the 1990s, the highest fertility rate was observed in countries where the educational level of women and their employment rate were the highest. It seems that incompatibility of employment of the highly educated and professionally ambitious women with maternity was preserved only in extreme cases; otherwise women may choose an appropriate ratio between their monthly working hours and number of their children. In industrialised countries, there have been numerous family policy measures as well as services helping women to cope with difficulties in their reconciliation of maternal and professional duties. In the past decades, there has also been an important change in the attitudes towards adequacy of out-of-family pre-school childcare or towards the possible negative consequences of mothers' employment for their children. Altogether, this gives promises of positive shifts in fertility, and is very important because of the constant increase in the educational level of the population.

In some countries, public policies are successful in terms of decreasing negative consequences of births for the more educated women and of creating conditions for

successful reconciliation of parenthood and professional careers. Corman (2000) and Hoem and Hoem (1989) compared the situation in France and Sweden. They discovered that, despite the fact that both countries significantly support families with children, French women have to cope with more problems than Swedish ones when deciding about the third child, which is a result of the (modified) male breadwinner model.<sup>6</sup> Consequently, it is the least likely for the highly educated women in France to have the third child. In Sweden, the situation is different: the dual-breadwinner model is practiced and the reconciliation of work and family is made much easier by implementing various public policy measures. As giving birth to children does not impose a threat to their careers, the impact of the higher level of education on the decision about the number of children is positive.

Knowledge about the characteristics of persons who wish to have large families but are not able to realize them is an imperative for the decision makers when they attempt to introduce efficient policy measures. In this context, more attention should be paid to the population with higher levels of education. Their fertility could be positively affected by measures that would remove obstacles that prevent them from having two or more children (a frequent wish among them). It seems that people in the Western Europe, in general, wish to have families with two children. However, research results indicating that younger generations wish to have ever less children should also be considered.<sup>7</sup>

Based on the Eurobarometer survey results, Heiland (2005) also proposes targeting measures of the family/population policy at the highly educated segment of the population. He believes that this should involve labour market measures with a particular emphasis placed on resumption of work upon return from the maternity leave and on childcare. This issue was tackled also by one of the panellists in the Slovenian Delphi Study who said that if a woman has three children and if, upon their births, she chooses to use the entire parental leave by herself (also when lasting over a year), the reasonableness of her studies on the tertiary level becomes questionable. Today, the loss of the human capital occurs extremely quickly since acquired knowledge soon becomes obsolete. It is, consequently, not enough to guarantee the return to job after parental leave. The returning parents (mostly mothers) should be assisted in catching up on information and knowledge that they have not acquired because of their long absence from work and which are necessary for performing their work according to expected standards.

## **Contextual framework**

### ***Some of the demographic characteristics of Slovenia***

In 1993, the number of deaths in Slovenia for the first time exceeded the number of births. The same pattern was observed in the entire period 1997-2005. This was due to the de-

---

<sup>6</sup> The male breadwinner model is based on the traditional division of labor. Only men are economically active while women carry out the unpaid housework and take care of children (and the elderly). In the modified breadwinner model, a substantial proportion of women withdraw from employment when they have young children. Mothers with older children have higher employment rates and higher average working hours, compared to mothers with younger children (Anxo et al. 2006).

<sup>7</sup> This research is quoted in Heiland et al. (2005: 2).

crease in the number of births since the death rate over decades has been more or less stable. The average number of live-born children per woman decreased from 2.11 in 1980 to 1.68 in 1985, 1.46 in 1990, 1.29 in 1995 and to only 1.21 in the period of 1999-2003 (since 2003, the numbers have been slowly increasing).<sup>8</sup>

The delay in childbearing is evident from the average age of mothers at birth of first child; in the period 1980 - 2006 it increased by 5.2 years (from the age of 22.8 years to the age of 28.0) (<http://www.stat.si/>). This is partly the consequence of the higher age at first marriage; the average age of the women married in 2006 was 28,1 which is almost six years more than in 1980, whereas for the newly married men this age was about three years higher in both years.

Slovenia has one of the lowest marriages rates in European countries. The number of marriages has almost halved in the last twenty years, while there has been only a slight decrease in the number of divorces. Also due to the decrease in the number of marriages, the proportion of children born to unmarried mothers is increasing: 13.1% children in 1980, 24.5% in 1990 and as much as 47.2% children in 2006.

Because of the decrease in births coupled with increasing life expectancy, the population of Slovenia is aging. In 1991, there were 534 persons aged 65 years and over per 1,000 persons younger than 15 years, whereas in 2002 their number was 963 (meaning an increase of 80%) (<http://www.stat.si/>).

The 2002 population census data show that, compared to 1991, there was an increase in the share of families with one child (from 21.6% to 23.0%), whereas there was a decrease in the share of families with two, three or more children (<http://www.stat.si/>). In 1991, the percentage of childless families was 21.6% and in 2002 it was 23.0%.

### ***Family policy measures***

Slovenia has a developed family policy. Parental leave with full income compensation lasts a year. By entitling fathers to an additional right of a three-month paternity leave, Slovenia is one of the most generous European countries with regards to paternity leave. When a child is born, its family is granted a package containing equipment for the newly born child or a financial equivalent.

The child allowances are relatively high for children from families with low income per member and increase with the number of children in the family. The percentage of children not entitled to allowances for being born in families with relatively high income per member is 30%. Once a year, each family with three or more children receives a large family allowance irrespective of its income.

Taxpayers are entitled to income tax allowance for their supported children; this allowance increases with the number of children. Despite the same amount of allowance for each child of a particular birth order, the actual tax saving increases with income, which is a consequence of progressive income tax rates.

---

<sup>8</sup> It should be noted that the decrease in the fertility rate has been characteristic for the Slovenian women over the last hundred years. Already the Slovenian women born around 1930 did not have enough children to allow for simple population reproduction (Ministry of Labour, Family and Social Affairs 1994).

Pre-school childcare programmes are attended by two thirds of children aged from one year up to the school age (<http://www.stat.si/>). The average subsidy (both in the public and private sector) amounts to approximately two-thirds of the programme cost, whereby the actual parent fees depend on the income per family member and the number of children of the same family attending the subsidized pre-school childcare.

### ***Attitudes towards reconciliation of professional and family duties***

Some of the reasons for not having a larger number of children are undoubtedly related to the issue of reconciliation of professional and family duties. The statement of one of the panellists in the Delphi Study is indicative: 'We have one child in order to attain a certain status; we should get ready for having two children, while the third child is a threat to our logistics.' In this chapter we present the attitudes of people (aged 20-64 years) in Slovenia towards a mother's employment and the way it is combined with motherhood.

### ***Employed mother***

Panellists in the Delphi Study were unanimous that it is important for the women to be employed and economically independent. For women, it is essential to have a certain reputation and to be respected also outside their families. The panellists held the government responsible for creating conditions for reconciliation of professional and family duties. In the Slovenian PPA survey, the share of the respondents (aged 20-64 years) who held the government (completely or quite) responsible for facilitating opportunities for both women and men to combine jobs with raising children was higher among those with above higher secondary education than among those with a lower attained level.

The survey results also indicate that the people with more education are more ready to realize the principle of gender equality in practice. This conclusion may be drawn from the higher frequency in their agreement with the statement that it is important for women to be employed and economically independent<sup>9</sup> as well as from the higher frequency of their disagreement with the statement that raising children brings more satisfaction to women than being employed – compared to the answers of the respondents with less education (Stropnik and Čerňič Istenič 2001).

### ***Ideal combination of employment and motherhood***

The highly educated women (aged 20-64 years) were the ones who selected the combination of motherhood and part-time (precisely half of the full-time) employment as an ideal one for themselves more frequently than the women with attained education below that level. This option was considered ideal by 41% of highly educated women, equalling the share of those who selected the combination of motherhood with full-time employment. The more the men were educated, the more frequently they favoured part-time employ-

---

<sup>9</sup> As expected, there were more women than men aged 20-64 years who agreed with this statement.

ment of mothers (their own partners). Full-time employment of mothers was selected as ideal for their partners by far the highest share of men that attained at most lower secondary education.

As much as 23% of women with at most lower secondary education find it ideal to be unemployed while children are small or living at home. The attractiveness of this option decreases with the increase in the educational level, but it nevertheless was opted for by one in eight women with more than the higher secondary education. The share of men finding this alternative an ideal option for their female partners is greater than the share of women at any of the educational levels (it is the lowest among highly educated men).

## **Attitudes and values of the highly educated, aged 20-49 years**

As an introduction into the analysis of the fertility behaviour of the highly educated, in this chapter the attitudes of the highly educated people aged 20-49 years towards population, childbearing, family and parenthood are first presented. Thereafter, values of the highly educated and other persons in the same age group are compared.

### ***Attitudes towards population***

Highly educated people aged 20-49 years wish somewhat more frequently than others to see the population of Slovenia increase in future (64% as compared to the average of 61%). An explanation for such attitude might be that this population group is more aware, compared to the others, of the negative consequences of the population decrease caused by the low fertility rate, and that they are less afraid of immigration (i.e. of risk of losing their jobs because of the immigrants' competition on the labour market).

The highly educated respondents with three or more children were the ones that most frequently (73%) expressed their preference towards an increase in the population of Slovenia. The concern for the future of the Slovenian population seems to be the lowest among the young people with no family commitments.

### ***Attitudes towards births***

The great majority of the highly educated aged 20-49 years (92%) finds the declining number of births as 'bad' and 'very bad', while 68% of them shared the same opinion regarding the increase in the number of children being an only child. When evaluating the increasing number of couples who decide to remain childless, there was almost no difference in answers of the highly educated aged 20-49 years and those of the same age group with at most lower secondary education. The rating of 'bad' or 'very bad' was given by 84% and 82% respondents, respectively.

There are several differences among the highly educated as well. For instance, there are relatively more answers 'bad' and 'very bad' given by respondents aged 35-49 years than by the younger ones (aged 20-34 years). Along with the increase in the number of children (from 0 to 3 and more) there is a decrease in the share of those that were indecisive, and an explicit increase in the share of negative assessments; the highest

share of answers 'very bad' (60%) was among the respondents that had three or more children. The share of the negative assessments is surprisingly higher among the respondents without a partner than among those living with a spouse/partner.

### **Values and attitudes towards the family and parenthood**

Only 30% of the respondents aged 20-49 years agreed that the people who wish to have children ought to be married. This agreement decreases with the increase in the educational level: from 39% among the respondents with at most lower secondary education down to 24% among the highly educated. Among the latter, this agreement is to some extent more frequent among women, and much more frequent in the older age group (aged 35-49 years) and among those living with a spouse/partner. Moreover, it increases notably with the increase in the number of children in a family (from 15% among the respondents without children up to 50% among respondents with three and more children).

As many as 80% of the highly educated aged 20-49 years agreed that if a woman wants to have a child alone without having a permanent partner, she should be allowed to do so. There was no great difference in terms of their gender, age, partnership status and number of children.

With regard to the share of non-marital births of children in Slovenia (37.1% in 2000, i.e. at the time of the survey), the share of the highly educated respondents aged 20-49 years who agreed that a child needs a home with both a father and a mother to grow up happily was extremely high: 91% (89% of all the respondents in this age group agreed with this statement). In a way, this proves that children born out of wedlock are not in the majority of cases born to women without a permanent or serious partner, despite the fact that there has been no (or not yet) marriage concluded,<sup>10</sup> and that the increase in the non-marital births is mostly the consequence of important changes in the family forms.

The above results are in a certain disharmony with the responses to the statement that one parent can bring up a child as well as two parents together. On average, 40% respondents aged 20-49 years agreed with it and surprisingly, the share of those agreeing slightly decreases with the increase in the attained educational level (from 42% among the respondents with at most lower secondary education down to 37% among the highly educated). There are great differences between the genders. This is probably because it is, as a rule, the mother that alone cares for children: 44% of the highly educated women and 29% of the highly educated men agreed with this statement. Similar percentages of agreement (48% and 28%, respectively) were recorded for the respondents aged 20-34 years and those aged of 35-49 years. The respondents without a partner or in a loose form of partnership agreed more frequently than those living with a spouse/partner that one parent can bring up a child as well as two parents together (some 50% compared to some 30%, respectively). It is not surprising that this agreement was more frequent among the respondents without children or with just one child (47% and 51% respectively) than

---

<sup>10</sup> Almost all non-marital births in Slovenia are registered by both parents (95% since the 1990s) (Šircelj 1998).

among those having two and three or more children (19% and 20% respectively). It is much harder for a person to care for several children by himself/herself.

### Life values

Because of an increasing importance of socio-psychological factors affecting decisions about having children, it is relevant to present life values of the respondents within the framework of our analysis. As seen from Table 1, the respondents aged 20-49 years highly value time available for themselves and their own interests, self-fulfilment, sufficiently high income and a vacation at least once a year. All this is very important or important for 85-93% of the respondents in this age bracket. Ratings of these values are very similar also for the highly educated group. The greatest difference is in the importance of a nice, spacious house: it is very important or important for 64% of all respondents aged 20-49 years and for 53% of the highly educated ones; it is most frequently important for the respondents that have less than higher secondary education (74%).

Table 1: Life values, Slovenia, 2000; respondents aged 20-49 years (%)

Life value	All respondents	% of the respondents for which individual life value is (very) important								
		All		Highly educated		No children				
		All	Male	Female	20-34 years	35-49 years	No children	One child	Two children	Three or more children
Having enough time for yourself and for your own interests	93	95	94	96	96	94	96	100	88	100
Being appreciated and respected outside your family	75	75	69	80	79	72	77	72	74	80
Having enough time for your friends	76	81	79	82	87	75	90	85	74	53
Having enough income/money	88	83	85	81	85	82	83	83	86	73
Having a vacation at least once a year	85	87	81	91	89	84	91	89	81	80
Living in a nice, spacious house	64	53	52	54	53	53	55	48	52	60
Striving for self-fulfilment	92	96	96	96	98	94	99	100	99	93
Husband and wife both earning their own income	74	73	67	78	76	70	75	80	73	43

Source: IPPAS database; own calculations.

Within the group of the highly educated respondents, some differences regarding life values can be observed. Having enough time for oneself and for one's own interests is less important for the respondents with two children than for others. This is quite understandable since in the opposite case they would not have decided to have two children. However, it is quite surprising that for all respondents with three or more children it is very important and important. Being appreciated and respected outside one's family is more important for women than for men, and more important for the older age group (35-49 years) than for the younger one (20-34 years of age). It may be that the women are more concerned about this issue than men because being recognized and valued outside the family is not automatically expected for them.

The younger group of the respondents is at the age when they create families and it is necessary for them to intensively commit themselves to caring for their children. Different from that, the children of the respondents from the older age group are mostly adults, for which reason recognition outside the circle of their families means for these women a sort of compensation for decreased family obligations.

Having enough time for one's friends is much more important for the younger than for the older group of the highly educated. We can also see that the importance of this life value decreases with the increase in the number of children.

Having enough money/income is much less important for the respondents with three or more children than for the rest of the highly educated. Having a vacation at least once a year is more important for women than for men. This is more important for the persons without children or with one child than for those with more children.

The importance of living in a nice, spacious house increases with an increase in the number of children (starting from one to three or more children). The opposite trend applies to the number of children applies for the importance of husband and wife both earning their own income. It is not surprising that this life value is much more important for women than for men.

## **Probable fertility response to implementation of the most desired measures**

The fertility behaviour of the population depends on numerous factors that are complexly interrelated. It is thus important to investigate the probable response of various population groups to the implementation of policy measures before these particular measures are proposed. In evaluation and interpretation of the expected impact, the generally known fact – that the survey results overestimate future fertility, which makes them an unreliable basis for forecasts – should not be neglected.

Judging from the answers of the Slovenian respondents, it can be concluded that the fertility rate would increase provided the government implements the measures people desire most. If the conditions remain unchanged, the persons aged 20-40 years intend to have 1.89 children on average. Due to the increase in the fertility rate of those that would – after the most desired measures are implemented – probably decide to have a(nother) child, the fertility rate would increase to 2.08, or by 0.19 children per woman. When only the answers of those that would reconsider the possibility of having a(nother) child are taken into account, the fertility rate would increase up to 2.12, or by 0.24 children per woman.

In Table 2, the agreement on possible impact of the implementation of the three most desired family policy measures on decisions about having children is shown for all respondents aged 20-49 years and (in more detail) for the highly educated ones is presented. The level of agreement with this statement decreases along with an increase in the level of the expressed commitment to have a(nother) child. It is evident that the highly educated are much more prudent in their answers than those with at most higher secondary education. It might also be that the measures in our questionnaire are not the ones creating appropriate conditions for the highly educated to have a(nother) child.

*Table 2: Probable effect of the implementation of the three most desirable family policy measures on having a(nother) child; Slovenia, 2000; respondents aged 20-49 years (% of those agreeing)*

	It would be easier for me to have the number of children I want	It would enable me to have my next child sooner	I would reconsider the possibility of having a(nother) child	I would probably decide to have a(nother) child
All respondents				
	66	56	55	53
Highly educated respondents				
All	54	45	44	45
Male	55	47	38	40
Female	54	44	49	50
20-34 years	70	55	55	61
35-49 years	41	37	34	32
No children	73	56	57	59
One child	50	44	33	42
Two children	38	37	36	33
Three or more children	50	36	50	46
No partner	70	48	47	43
Living with a partner	47	42	40	42

Source: IPPAS database; own calculations.

For the last two statements (both indicating a probability of previously unintended births), the attitudes of the highly educated differ by gender; it seems that the impact would be stronger for women than for men. The difference is even greater between the answers of the two observed age groups, which is quite understandable. The fertility rate of women in Slovenia being lower after 34 years of age than before, one can not expect it to change importantly just as a result of the implementation of the three family policy measures. It also appears logical that the level of the possible responsiveness to the measures decreases along with an increase in the number of one's own children, though one can be quite surprised by the answers of the respondents with three or more children forecasting a relatively large positive impact of the observed measures on their fertility. This can be to a large extent attributed to the small number of such respondents in the sample. The impact of the implementation of three most desired measures would be greater for persons without a partner at the time of our survey than for those living with a spouse/partner; it would particularly be easier for them to have the number of children they want. However, there are no differences between these two groups regarding agreement with the most binding statement, i.e. that of probably deciding to have a(nother) child.

To summarise, implementation of the three most desired family policy measures would have the greatest impact on decisions about having a(nother) child taken by young

(aged 20-34 years) persons not yet having any children and having no partner (at the time of our survey).

## Intended and realised number of children

A desire to have a certain number of children pays no regard to the existing constraints and obstacles. It is therefore better to ask in the questionnaire about the intended number of children because intention takes due regard of the existing constraints and obstacles. The realised (actual) and intended number of children by gender, age<sup>11</sup> and educational level of the respondents will now be analysed. In Table 3, the actual number of one's own children at the time of the survey is shown. To allow for a better insight into the situation, Figure 1 focuses on the results obtained for the age groups of 25-34 years and 35-44 years.

Table 3: Distribution of respondents according to the actual number of own children; by gender, age and attained educational level of the respondent, Slovenia, 2000 (%)

Actual number of own children	Respondent's gender, age (years) and attained educational level											
	Females											
	25-34 years			35-44 years			45-54 years			55-64 years		
	Low	Middle	High	Low	Middle	High	Low	Middle	High	Low	Middle	High
0	0	25	63	6	10	11	7	1	9	3	4	21
1	31	32	26	18	21	25	17	16	26	15	16	29
2	56	34	5	59	55	50	52	62	51	48	61	43
3	6	6	5	12	12	11	17	17	12	21	18	7
4	6	1	2	4	2	2	4	3	2	11	2	0
5	0	1	0	0	1	0	3	1	0	3	0	0
Total	100	100	100	100	100	100	100	100	100	100	100	100
	Males											
	25-34 years			35-44 years			45-54 years			55-64 years		
	Low	Middle	High	Low	Middle	High	Low	Middle	High	Low	Middle	High
0	52	39	64	23	17	17	13	4	19	5	2	4
1	33	24	15	32	22	25	6	19	22	25	27	17
2	10	23	21	36	54	56	55	54	53	25	57	63
3	5	4	0	9	6	3	23	20	6	25	10	17
4	0	1	0	0	0	0	3	3	0	15	4	0
5	0	0	0	0	1	0	0	0	0	5	0	0
Total	100	100	100	100	100	100	100	100	100	100	100	100

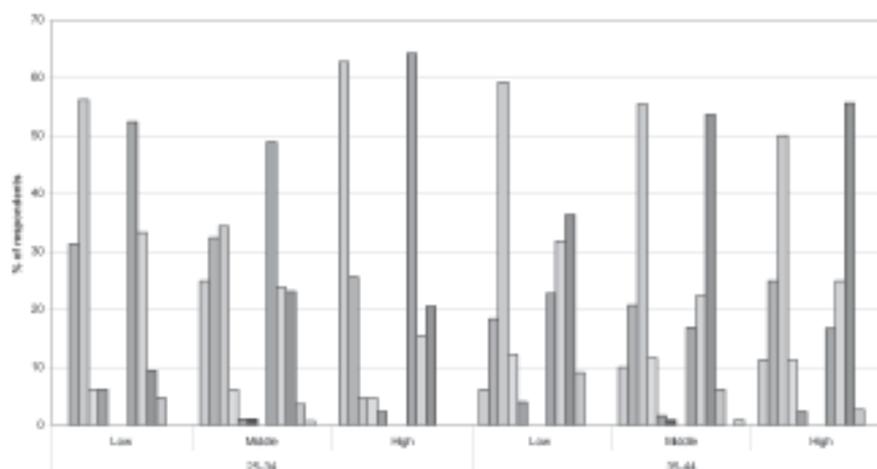
Source: IPPAS database; own calculations.

Note: Low education – below higher secondary; middle education – higher secondary; high education – more than higher secondary.

Along with the increase in the educational level of the population, there is also an increase in the number of women having no children. In the age group of 25-34 years, all the women with a low educational level have children, while this is not the case for a quarter of the women with higher secondary education (middle education in Tab. 3 and Fig. 1) and as much as 63% of those with high education. In the age group of 35-44 years, the differences between the educational groups of women are much smaller and do not exceed 5 percentage points.

<sup>11</sup> Ten-year age groups of the respondents were formed for methodological reasons.

Figure 1: Distribution of respondents according to the actual number of own children; by gender, age and educational level of the respondent, Slovenia, 2000 (%)



Source: IPPAS database, own calculations.

Notes: (1) Groups of columns for female and male respondents are being interchanged (by educational levels).  
 (2) Columns in the same group stand for the number of children: 0, 1, 2, 3, 4, and 5 and more.

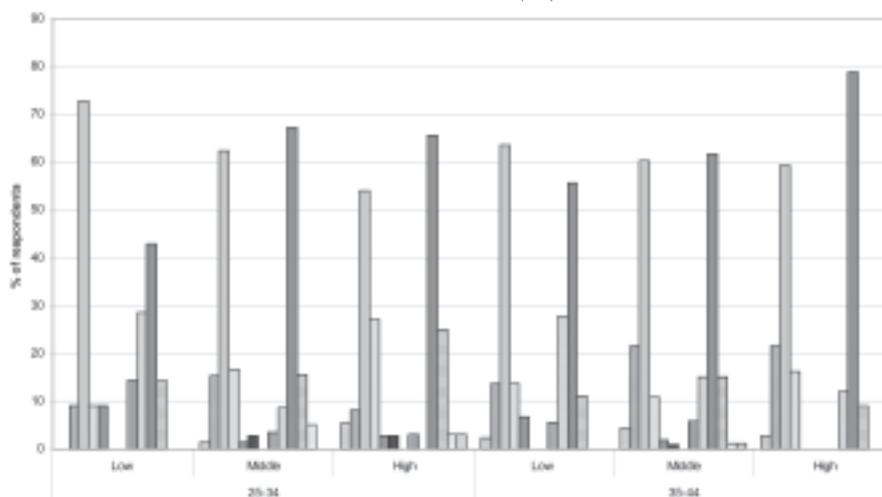
In the age group of 25-34 years, most of the women with a low educational level (attained primary or lower secondary education) already have two children (56%). The same applies to one third of the women with higher secondary school education (one third have one child) and only a small share of women with high education (about a quarter has only have their first child). In the age group of 35-44 years, one half or more (up to 59%) women in any of the educational groups has two children. The percentage of the low educated women having one child is 18% while the respective share of the highly educated women is 25%. The share of women with three or more children does not differ very much by educational group (16% of low educated women and 13% of highly educated ones).

In any of the educational groups of men aged 25-34 years, there is a large share of persons having no children. The differences between genders amount to 52 percentage points among the low educated ones and 24 percentage points among those with higher secondary education, whereas there is hardly any difference among the highly educated ones. This may be explained by the fact that the women with less than high education start having children earlier than the highly educated ones, and they also have children earlier than the men with the same educational level. At the age of 25-34 years, men with less than higher secondary education have one child more frequently than others, whereas those having at least higher secondary education have two children more frequently than others. The reason why highly educated men have two children much more frequently than highly educated women in the same age group may be found in the fact that a certain share of these men have partners with lower educational levels.

In the age group of 35-44 years, low educated men do not have any children more frequently (in 23% of cases) than those with higher secondary and high education (17% of each). Since the low educated have also one child more frequently than the others, there are only 36% of them having two children. The latter is the case of more than a half of men with higher secondary and higher education.

Figure 2 shows the intended number of children by gender, age and educational level of the respondent. A small share of those not intending to have any child is evident. The predominant intention is to have two children. The differences by educational level are much more explicit among younger women (aged 25-44 years) than in the older age group (35-44 years). Women in the older age group intend to have only one child much more frequently than those in the younger age group. Those having attained higher secondary ('middle' in Fig. 2) and high educational levels rather rarely intend to have the third child.

Figure 2: Distribution of respondents according to the intended number of children; by gender, age and educational level of the respondent, Slovenia, 2000 (%)



Source: IPPAS database, own calculations.

Notes: (1) Groups of columns for female and male respondents are being interchanged (by educational levels).

(2) Columns in the same group stand for the number of children: 0, 1, 2, 3, 4, and 5 and more.

Figure 2: Distribution of respondents according to the intended number of children; by gender, age and educational level of the respondent, Slovenia, 2000 (%)

The intention to have children is no more frequent among men in the younger age group than among those in the older age group. As for men with medium and high education, those in the higher age group intend to have only one child more frequently than those in the younger age group. The older the men with the low education, the more frequently they intend to have two children. Such intentions are even more present among men aged 35-44 years with higher secondary education and especially among those with high education.

On average, the men aged 25-34 years intend to have almost the same number of children (2.02) as women of the same age (2.00). Different intentions of the partners result in a lower final number of children than intended by at least by one of the partners.

Table 4 shows the structure of the respondents in terms of the difference between the intended and realised number of own children. As expected, the difference is greater in the younger age group of the respondents than in the older one. Important differences by gender can only be found among persons aged 25-34 years and with attained higher secondary education (middle education in Tab. 4); more than a half of the women already have all the children that they intend to have, which is true for only a good quarter of men. We can also see that at this age, the majority of women and (particularly) men have not yet realized their fertility intentions. At the age of 35-44 years, over 90% of the women with at most higher secondary education have already realized their fertility plans, while less than a fifth of the highly educated intend to have one or two children more. In this age group, men intend to have a(nother) child somewhat more frequently than women. The number of children that the respondents still intend to have generally

*Table 4: Distribution of respondents according to the difference between the intended and realised number of children; by gender, age and educational level of the respondent, Slovenia, 2000 (%)*

Difference between intended and realised number of children	Age of the respondent (years) and attained educational level					
	Females					
	25-34			35-44		
	Low	Medium	High	Low	Medium	High
0	55	53	16	91	94	81
1	45	19	27	7	5	16
2	0	24	38	2	1	3
3	0	4	19	0	0	0
Total	100	100	100	100	100	100
	Males					
	25-34			35-44		
	Low	Medium	High	Low	Medium	High
0	57	26	13	89	84	73
1	14	24	19	0	7	12
2	21	42	50	11	5	12
3	7	6	13	0	5	3
4	0	2	3	0	0	0
5 or more	0	0	3	0	0	0
Total	100	100	100	100	100	100

Source: IPPAS database; own calculations.

Note: Low education – below higher secondary; middle education – higher secondary; high education – more than higher secondary.

increases with an increase in the attained educational level irrespective of the respondents' gender and age group.

A comparison of the number of one's own children at the time of the survey and the final number of children that the women intended to have, by educational level and age group, showed that – compared to those with less education – highly educated women start having children at a more advanced age; at the age of 25-34 years they have two children much more rarely; and at the age of 35-44 years they have only one child relatively more frequently. Further on, they do not differ much with regard to the frequency of three children. At the age of 25-34 years, they intend to have three or more children more frequently, and at the age of 30-39 years they intend to have a(nother) child much more frequently.<sup>12</sup>

### **Instead of conclusions, some guidelines for policy making**

Obstacles preventing people from having the intended number of children should be investigated and removed. When shaping related policies, it should be born in mind that the difference between the desired/intended and realised number of children is the greatest among the highly educated population. Due to longer education, their economic and other aspects of independence are postponed into their mid-twenties, i.e. five or more years (depending on the duration of schooling) compared to those who attained higher secondary education, and even more compared to the low educated. This is the reason why, as a rule, they have their first child later, which lowers the probability for finally having as many children as they have intended to have. The survey data show that among highly educated women (and men) in Slovenia, the intention to have a(nother) child persists up to their forties. However, after the woman's age of 37 years, the probability of conception very much decreases, not to mention that other constraints affecting the decision about having a(nother) child (like health problems or a broken partnership) accumulate over the years.

These are the arguments speaking in favour of adopting and implementing measures enabling or making it easier for the young, particularly those highly educated, to have the intended number of children at the time when there is a high probability for a woman to get pregnant and a low probability of a major risk during pregnancy. Such measures should be related, among others, to greater availability of non-profit housing for the young; making it easier for the young to resume their work after several (or long) absences from the labour market due to childbearing or taking caring of their children (by offering them additional education or training); enabling and stimulating flexible forms of employment (in particular with regard to working hours); and guaranteeing access to a quality and low-cost pre-school childcare.

---

<sup>12</sup> The last finding results from an analysis of five-year age groups. At the age of 30-34 years, 33% of the low educated women, 23% of women with higher secondary education and 75% of the highly educated women intended to have a(nother) child. At the age of 35-39 years, the respective shares are 10%, 6% and as much as 29%.

Young highly educated people call attention to the need of having family policy in Slovenia reconsidered because it most unequally treats the young families with the income per member higher than the average earnings. For instance, though the pre-school childcare is on average highly subsidized, it is extremely expensive for the families with a relatively high income (these being mostly the families of the highly educated parents), particularly when there are two or three pre-school children in a family. The parent fee may annul the positive effect of the parents' high education (and the consequently more responsible and demanding work) on the family disposable income. Moreover, the families of highly educated parents (and particularly those having just one child) are usually not entitled to child allowances as well as to several other means-tested transfers. The result of such state is that the disposable income of the young families with highly educated parents is often below that of the families with less educated parents earning lower income.

It is particularly important to further develop family policy in order to improve the reconciliation of family and professional life. Being successful and efficient in one area of human life (either family or employment) should not substantially interfere with being so in the other. Where the emphasis should be laid depends on one's current position in the life cycle, but in a long-term, the balance between the two commitments should be targeted.

It is quite clear that the government, apart from adopting appropriate political measures, cannot provide by itself all the conditions necessary for achieving this goal. A considerable responsibility with this respect remains with employers who should adopt family-friendly attitudes and practices. Employers should always bear in mind that their employees have to be responsible parents, too. The government's role with this regard would be its stimulating and promoting corporate social responsibility and particularly the responsibility of companies towards their employees with family responsibilities.

## References

- Becker, Gary. 1981. *A Treatise on the Family*. Cambridge and London: Harvard University Press.
- Anxo, Dominique, Jean-Yves Boulou, Colette Fagan, Inmaculada Cebrián, Saskia Keuzenkamp, Ute Klammer, Christina Klenner, Gloria Moreno, and Luís Toharía. 2006. *Working Time Options over the Life Course: New Work Patterns and Company Strategies*. European Foundation for the Improvement of Living and Working Conditions. Luxembourg: Office for Official Publications of the European Commission.
- Castles, Francis G. 2003. The World Turned Upside Down: Below Replacement Fertility, Changing Preferences and Family-Friendly Policy in 21 OECD Countries. *Journal of European Social Policy* 13(13): 209-227.
- Corman, Diana. 2000. Family Policies, Working Life and Third Child in Two Low-Fertility Populations: a Comparative Study of Contemporary France and Sweden. *Family and Fertility Survey Flagship Conference, Brussels*.
- Easterlin, Richard A. 1976. The Conflict between Aspirations and Resources. *Population and Development Review* 2(3-4): 417-425.
- Heiland, Frank. 2005. Do the More Educated Prefer Smaller Families? *Paper presented at the International Population Conference, July 2005, Tours*.
- Heiland, Frank, Lexia Prskawetz, and Warren C. Sanderson. 2005. Do the More-Educated Prefer Smaller Families? *VID Working Papers* 03/2005. Vienna: Vienna Institute of Demography.
- Hoem, Britta, Jan M. Hoem. 1989. The Impact of Women's Employment on Second and Third Births in Modern Sweden. *Population Studies* 43(1): 47-67.

- Hoem, Jan M., Alexia Prskawetz, and Gerda Neyer. 2001. Autonomy or Conservative Adjustment? The Effect of Public Policies and Educational Attainment on Third Births in Austria, 1975-96. *Population Studies* 55: 249-261.
- Knudsen, Lisbeth B. 1995. Do Gender-Specific Differences in Fertility Pattern in Denmark Reflect Different Expectations to Men and Women? *Paper presented at the European Population Conference, September 1995, Milan.*
- Kožuh-Novak, Mateja, Dunja Obersnel Kveder, Majda Černič Istenič, Vojka Šircelj, and Vasja Vehovar. 1998. *Rodnostno vedenje Slovencev: nacionalno poročilo (Reproductive Behaviour of Slovenians: National Report)*. Ljubljana: Založba ZRC, ZRC SAZU.
- Kraval, Øystein. 1992. The Emergence of a Positive Relationship Between Education and Third Birth Rates in Norway with Supportive Evidence from the United States. *Population Studies* 46 (3): 459-475.
- Liefbroer, Aart C., Martine Corijn. 1999. Who, What, Where, and When? Specifying the Impact of Educational Attainment and Labor Force Participation on Family Formation. *European Journal of Population* 15: 45-75.
- Ministry of Labour, Family and Social Affairs. 1994. Slovenian National Report. *International Conference on Population and Development, September 1994, Cairo.*
- Moors, Hein, Rossella Palomba (eds.). 1995. *Population, Family, and Welfare: A Comparative Survey of European Attitudes. Volume I*. Oxford: Clarendon Press.
- Obersnel Kveder, Dunja, Mateja Kožuh Novak, Majda Černič Istenič, Vojka Šircelj, and Vasja Vehovar, Barbara Rojnik. 2001. *Fertility and Family Surveys in Countries of the ECE Region. Standard Country Report. Slovenia*. UN Economic Commission for Europe, Economic Studies No. 10r. New York and Geneva: United Nations.
- Oláh, Livia 1996. The Impact of Public Policies on the Second-Birth Rates in Sweden: a Gender Perspective. *Stockholm Research Reports in Demography* 98.
- Palomba, Rossella, Hein Moors (eds.). 1998. *Population, Family, and Welfare: a Comparative Survey of European Attitudes. Volume II*. Oxford: Clarendon Press.
- Rønsen, Marit. 1997. Fertility and Public Policies – Evidence from Norway and Finland. *The 11<sup>th</sup> Annual Meeting of the European Society for Population Economics, Cholchester.*
- Schultz, Paul T. 1994. Human Capital, Family Planning, and Their Effects on Population Growth. *The American Economic Review, Papers and Proceedings* 84(2): 255-60.
- Šircelj, Milivoja. 2006 *Rodnost v Sloveniji od 18. do 21. stoletja (Fertility in Slovenia from the 18th to 21st Century)*. Ljubljana: Statistični urad Republike Slovenije.
- Statistical Office of the Republic of Slovenia, Ljubljana, website <http://www.stat.si>.
- Stropnik, Nada, Majda Černič Istenič. 2001. *Prebivalstvo, družina, blaginja: stališča do politike in ukrepov (Population, Family, Welfare: Attitudes toward Policy and its Measures)*. Ljubljana: Institute for Economic Research.

## **Povzetek**

Članek obravnava rodnostno vedenje visoko izobraženega prebivalstva, starega 20-49 let, v Sloveniji. Pretežno temelji na anketnih podatkih iz leta 2000. Uporabili smo deskriptivno statistično analizo. Ugotavljamo, kakšen bi lahko bil vpliv novih ali spremenjenih ukrepov družinske politike. Strinjanje s tem, da bi uvedba treh najbolj zaželenih ukrepov družinske politike pozitivno vplivala na odločanje za (naslednjega) otroka, upada, kakor postajajo izjave bolj zavezujoče. Vseeno je 45% visoko izobraženih menilo, da bi se po uvedbi treh najbolj zaželenih ukrepov verjetno odločili imeti (še enega) otroka. Primerjamo dejansko in nameravano število otrok visoko izobraženih in drugih izobrazbenih skupin prebivalstva. Število otrok, ki jih anketiranci še nameravajo imeti, praviloma narašča z višanjem dosežene izobrazbene ravni anketiranca ne glede na spol in starostno skupino. Podajamo nekaj predlogov za nove poudarke v družinski politiki v Sloveniji, ki bi predvsem visoko izobraženim olajšali, da bi realizirali nameravano število otrok.

**KLJUČNE BESEDE:** rodnost, nameravano število otrok, visoko izobraženi, stališča, vrednote, družinska politika