HACETTEPE UNIVERSITY INSTITUTE OF POPULATION STUDIES
Economic and Social Demography Program

SOCIAL AND DEMOGRAPHIC DETERMINANTS OF FAMILY FORMATION IN POST-TRANSITION BULGARIA

H. YAPRAK CİVELEK

Dissertation Submitted in Partial Fulfilment of the Requirements
for the Degree of Doctor of Philosophy
in Economic and Social Demography

Ankara, September 2006

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ABSTRACT

Main objective of this thesis is to find out social and demographic determinants of family formation in post-transition Bulgaria. At first, the study examines the social and demographic developments in the country as a European country and then, as one of the Balkan countries. The study which begins with the acceptation of the reality that the attitudes and approaches to family building have changed, presents a background of the current situation of family formation by mentioning prevailing social and demographic circumstances in pre and post transition Bulgaria.

In this study, data of the "Fertility and Family Survey, Bulgaria" was used. This survey was conducted by Bulgarian Academy of Sciences in December, 1997. The respondents were the women aged 18-45. Men were not involved in the survey sample because of the financial restrictions. During the survey 2367 women were interviewed.

The thesis includes two different types of analysis: Descriptive analyses and multivariate analyses. Multivariate analyses cover regression and "decision tree" analyses. It is the first demographic study which employs "decision tree" analysis which is usually used by the scientists working on "data mining system" among the studies on family formation in our country. This method is employed in order to add new details to the results of regression analyses, thus "intention to have a(nother) child" which is a significant issue regarding social and demographic researches is examined. In the first place, data sources of the descriptive analyses are the censuses. These analyses determine the place of Bulgaria among the other Balkan countries, social and demographic developments in pre and post transition Bulgaria; it particularly presents the changes in fertility, marriage and family building. In the second place, the descriptive analyses examine basic demographic characteristics of the women who are the origins of the data used, their reproductive behaviors and their attitudes to family building. Multivariate analyses examine the relationship among the women's background characteristics, fertility intentions, and consequently, their approaches to family building.

ÖZET

Bu tezin temel amacı geçiş sonrası Bulgaristan'da aile formasyonunun sosyal ve demografik belirleyicilerini keşfetmektir. Çalışma, başlangıç olarak, bir Avrupa ülkesi olarak, daha sonra da Balkan ülkelerinden biri olarak, ülkedeki sosyal ve demografik gelişmeleri incelemektedir. Aile kurmaya karşı tutumların ve yaklaşımların değişmekte olduğu gerçeğinin kabulu ile yola çıkan çalışma, geçiş öncesi ve sonrası Bulgaristan'da hüküm süren sosyal ve demografik koşulları da sunarak aile formasyonunun bugünkü durumunun bir arkaplanını sunmaktadır.

Çalışmada "Doğurganlık ve Aile Araştırması, Bulgaristan" (Fertility and Family Survey, Bulgaria-FFS) verisi kullanılmıştır. Araştırma, Kasım, 1997 tarihinde, Bulgaristan Bilimler Akademisi tarafından gerçekleştirilmiştir. Cevaplayıcılar 18-45 yaşları arasındaki kadınlardır. Finansal sınırlamalar nedeniyle çalışmada erkekler yer almamaktadır. Araştırma sırasında 2367 kadın ile görüşme yapılmıştır.

Bu çalışmada, iki farklı analiz yöntemi kullanılmıştır: Tanımlayıcı analizler ve çok değişkenli analiz yöntemleri. Çok değişkenli analizler regresyon ve karar ağacı analizlerini kapsamaktadır. Aile formasyonu konusunda yapılan çalışmalar arasında, ilk defa olarak, "veri madenciliği" alanında kullanılan "karar ağacı" metodu kullanılmıştır. Bu yöntem ile, regresyon sonuçlarına ayrıntı kazandırılmakta ve sosyal ve demografik araştırmalarda önemli bir yeri olan "çocuk sahibi olma niyeti" incelenmektedir. Çalışmada tanımlayıcı analizler ve çok değişkenli analizler bir düzen içinde gerçekleştirilmiştir: İlk aşamada tanımlayıcı analizlerin veri kaynağı sayımlardır. Bu analizler, Bulgaristan'ın Balkan ülkeleri arasındaki yerini, geçiş öncesi ve sonrası Bulgaristan'daki sosyal ve demografik değişmeleri, özellikle, doğurganlık, evlilik ve aile kurma konusundaki gelişmeleri sunmaktadır. İkinci planda, tanımlayıcı analizler, kullanılan verinin kaynağı olan kadınların temel demografik karakteristiklerini, üreme davranışlarını, aile kurmaya karşı olan tutumlarını incelemektedirler. Çok değişkenli analizler ise kadınların temel karakteristikleri ve çocuk sahibi olma niyetleri arasında ilişki kurmaktadır.

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This thesis bases on intensive study programs including long travels, observations and detailed examinations. But I must confess that my special interest to the Balkan countries and particularly Bulgaria's cultural aspects partly resembling Turkish cultural values are the basic inspiration of this thesis. When this inspiration associated with my scientific targets, forming of this study was certainly inevitable. At the beginning, it was very difficult for me to study on a foreign country that I have ever been even once and I needed a good advisor to determine the stages of development of my dissertation. But, throughout the study I have many advisors encouraging me very sincerely. Therefore I must talk about my sense of indebtedness to these persons that I have always remembered.

I am greatly indebted to my academic supervisor Assoc. Prof. Banu Ergöçmen for the reason that she never gave up encouraging me even during the hardest times of this study and she always met me with her unending patience and smiling face in her office.

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CHAPTER I. INTRODUCTION

Family has always been a primary concept of all times, both in scientific framework and in everyday life. With the most classical definition, it is a "building structure" and consists of a mother, a father and their child/children. However, according to United Nation's (UN) broad definition: The family within the household is defined as those members of the household who are related, to a specified degree, through blood, adoption or marriage. The degree of relationship used in determining the limits of the family in this sense is somewhat dependent upon the available data and thus establishing a universal definition for worldwide use is rather difficult (United Nations Statistics Division, 2006).

While the social scientists argue on the traditional definition of the concept of family, they at the same time, follow the universal transformation of family as a social institution. In time there has been a change from "traditional family" to "modernized family". However, family has always been discussed and emphasized as an indispensable and as the smallest unit of a society. Socially it is formed by individuals, kept or broken by individuals again. Moreover, social scientists tend to name family according to its size; such as nuclear family, extended family, *zadruga*[1] (Todorova, 1983; Botev, 1990) and the like. This study is interested in particular in "family formation" in which the emphasis is on "building a family" rather than on its size. Family formation is an issue of family demography because family is the social unit through which the population in most of the cases has the chance to renew itself.

By Norman Ryder's expression;

> *"For a population, the significance of the passage of time is the problem of replacement. If the population is to persist, despite the mortality of its individual members, new personnel must be continually created and prepared to fill the roles of those who die. The family is above all the institutions to which is assigned the responsibility for*

[1] The oldest and most crowded family type in the Balkans, which was formed by many family groups and based on strong blood ties.

attempting to solve the problems of the passage of time both for the individual and for the population (Ryder, 1987)".

Family demography has overburdened to family concept by announcing its contribution to the "replacement of population". For the last two decades, especially in the West and East European Countries, the populations are gradually aging due to low fertility level; in most of these countries fertility rates are substantially below the replacement level. Thus, if family is considered as the responsible institution for the replacement of population, the decline in number of families is also crucial.

In the second place, family demography also takes into account continuing socio-economic changes of the societies, because especially in the case of rapid transformations, the responsibility of family to renewing the population comes to a halt. While Caldwell and Caldwell (1987) discuss the relation between the socio-economic developments and traditional family as well as impact of modernization on the traditional family, they emphasize two modes of production; familial production and labor-market production. The first one refers to the production which is for subsistence and the producers are internally determined by the family. The second is determined by a construction which is determined by the society and the economy, that is to say, it refers to a construction which is external to the family. The familial production is determined by high mortality and fertility where fertility is defined as uncontrolled fertility behavior, whereas labor-market production is determined by low fertility and mortality. The change from the familial production to the labor-market production has been entitled as "demographic transition" by demographers (Caldwell and Caldwell, 1987). However, it should be known that these two types of transitions (economic transition and demographic transition) are to some extent problematical processes for the societies. The principles of labor-market exist almost all around the world. This is in general due to the industrialization and rapid urbanization that usually occurs together with the importation of Western values. In this sense importation of the cultural values can not be avoided. In other words, economic and political transitions denote a considerable change in social balance. The society will have a new situation; it will include new ideological thoughts,

political movements and economic processes which are most probably determined by high inflation, expensive living conditions, impoverishment and loss of socio-cultural values. All the transition countries experienced these processes in late 1980s and 1990s. At that point, as Caldwell and Caldwell (1987) emphasize, *in the Third World, imported cultural elements can produce family change, and it is even possible that social and political ideologies can move familial and demographic change ahead of the economic transition.* The times of the transition in the Balkan countries reflect similar situation with the Third World countries; also in these countries the new-fangled social and political principles after the transition move familial and demographic change ahead of the economic transition.

It is now a well-known fact that starting point of the ongoing changes in the economic system, social structure and demographic behavior is the Western thought and, the last successors of this thought undoubtedly became socialist governments that struggled to keep their socialist structures for a long time. According to Dawisha and Parrott (1994), who focus on the old and recent political, social and economic developments in the post-Soviet states, *nations are not social constructions rather than natural entities.* The societal processes create nations. Social changes associated with modernization force nations to determine new socio-cultural symbols (such as language, ethnic and national identities) and to develop their economies in accordance with changing prevailing economic rules, and to establish normal international economic relations with the other world countries. Although uncertainty during the economic transformations necessitates economic reforms, desire for the more democratic atmosphere in the society and efforts of the policy-makers can create new economic hardships. Free market and democratization serve an increase in international harmony, but transitional effects of being a market economy and democratization are uncertain and potentially dangerous; economic crisis will most probably result in social unrest.

The economic ambiguity and social unrest, particularly in 1990s were not only experienced by the Eurasia states but also experienced by the Central and Eastern European countries in the Balkan peninsula. In other words, the collapse of Union of

Soviet Socialist Republics (USSR) brought about the collapse of other communist regimes including the Balkan countries which were accepted as the satellites of the Russian communism.

Dawisha and Turner (1997) suggest that economically, every post-Soviet society has had difficulty in the stabilization of its economy and suffered hyperinflation. Socially, although the process of democratization is an ideal it is responsible for living standards and deteriorating institutions. On the other hand, culturally, these societies are characterized by questionable levels of tolerance toward minorities and expressions of difference, because, for democratization, the respectful approach to ethnic identities and different cultural attributes and, free expression are essential. That is to say, while economic system and social structure are being reconstructed, rights of the people from several cultures have to be kept in mind. The other transition countries in the Balkan Peninsula are also definitely familiar with these developments.

Nevertheless, in terms of demographic developments and particularly of fertility behavior, the former Soviet Union Countries and Balkan countries should be evaluated more carefully. While fertility in the Central and East European countries is defined with the lowest fertility in the world, fertility decline in the post-Soviet societies has different trends, especially before 1990s. According to "Economic Survey of Europe" published by United Nations Economic Commission for Europe (UNECE) (1991); with respect to fertility, the former Soviet Republics demonstrated higher degree of uniformity than the Balkan Countries and this uniformity continued up to 1990s; the mean age of childbearing slightly fluctuated from 1982 to 1988. The onset of the fertility decline came across the late 1980s and mean age of childbearing also accompanied to it. But in the late 1990s, in Belarus, Russia, Republic of Moldova and Ukraine, this trend was very different; mean age at childbearing was about 26 years in 1997. *The fertility rates at higher childbearing ages have fallen relatively more than more than those at early ages* (UNECE, 1991). However, in most of the Central and Eastern European countries the trend of later childbearing comes across the half of 1980s and accelerates after the transition.

On the other hand, Eurasia includes societies which have some religious and traditional aspects. For instance, in the countries that have Christian culture such as Russia and Ukraine, fertility is under the replacement level as it is in the Balkan countries, because these are thought to be the societies that have rapidly dissolving social values and can easily adapt to Western trends. In the post-Soviet societies which have Turkic traditions such as Tajikistan, Kazakhstan and Kyrgyzstan, fertility has never fallen under replacement level because family building and childbearing are very traditional components of these cultures. However, the post-Soviet societies that do not have Turkic living principles have common features regarding fertility decline and family patterns. In these countries during the post-transition period, the pace of fertility decline was rapid and changed in congruence with the Western values. Thus, as regards demographic patterns post-Soviet societies that have Turkic living principles and non-Turkic living principles should be evaluated in by taking their cultural values and views into consideration.

Since the mid-nineteenth century, family demographers have searched main reasons of the traumatic decline in fertility and number of families in Central and Eastern European countries which are among the successor states to the USSR. They especially focus on the decline in number of marriages by giving priority to the socio-demographic determinants of marriage and, childbearing. The studies that have been done on the typical characteristics of the transition countries in Balkan Peninsula demonstrate that these countries have experienced more or less similar demographic developments in the post-transition period.

The following paragraph summarizes the effects of the transition in Post-transition Balkan Countries:

> *"The transition as a discontinuity threatens security of jobs and income and hence supports the rise in economic hardship and impoverishment. It affects norms, values, preferences, and behavior. The break of norms and values unfolds social anomie. Disorientation and uncertainty increase in societies where normlessness prevails. Affected*

people may decide to postpone and even reject crucial and irreversible life events, such as marriage or birth of a child. Hence discontinuity, along with other factors, causes a fall in fertility." (Philipov, 2002)

The transition in these societies brought about lower fertility, higher mortality and speedily aging populations. The comparative studies[2] show that demographic indicators, such as population decline, crude birth rate, total fertility rate, crude death rate, infant mortality rate and life expectancy at birth, point out rapidly declining fertility and consequently, rapidly aging populations. However, among the Balkan countries demographic indicators of Bulgaria are the most traumatic ones. The lowest fertility level among the Balkan countries is observed in Bulgaria.

According to Crampton (1997), after 1944 Bulgaria established closer relations with Russia *at enormous cost to political liberty of the Bulgarian citizen, as well as to the long-term economic and environmental well-being of the country.* In 1960s, although Bulgarian authorities of the communist time had always remained true to the Soviet rules, they developed more relationship with the West. In the early times of 1970s, strong diplomatic relations were established with West Germany and then trading relations were reinforced. At the same time, political links with the Third World were also developing. After 1989 Bulgarian political attitude had completely changed and establishing closer relations with European Union became the main goal of the Bulgarian government and interestingly, pro-American feeling gradually increased. These developments opened the doors of the world to the trained Bulgarians. Crampton (1997), points out that *at home vast majority of the population were content or apathetic".* Expectedly, demographic indicators of the country population were being affected by the governmental politics regarding foreign policies. In the communist period everybody was working and their fertility intentions were encouraged by the government. Every child was supported with a satisfactory allowance and as a requirement of the communist regime; training costs of the children were paid by the government. However, fertility was continuing to its gradual decline and number of the families which tried to keep their wholeness or

[2] In chapter 5 of this dissertation demographic developments Albania, Bulgaria, Romania, Russia and Turkey are given in a comparative way.

which would be newly established was also gradually decreasing as it has been in Western world.

Bulgaria's post-transition phase came across the beginning of 1990s. Throughout the first half of the 1990s, the market-based democracy was the main target of Bulgarian government but building it was not easy; the country was shaken by political instability. Economic indefiniteness and high inflation brought about social disintegration. According to Crampton (1997), the economic reforms was painful especially in the early times of transition but they proved Bulgaria's reforming intend to the Western authorities. Bulgaria was benefiting from the aids of European Community to survive in Eastern Europe. On the other hand, social disintegration and individualistic forms of life could not be prevented and caused new living arrangements among the people living in the country. Education and profession became important to find a place into this new capitalistic order. In particular, Bulgarian women were the best candidates of this stream. Accordingly, fertility decline gained speed and number of the couples who intended to establish a family started to decrease.

So far discussions indicate that Bulgaria can be suggested as the best example of the countries who try to keep their esteems in the world despite the extremely high inflation created by a –so called- economic-*transition*[3] and despite its destructive effects on the social and demographic structure. The post transition period of the country has been studied based on the demographic and social family related issues that have arisen in this period. Namely; marriage patterns, entry into marriage, intention to have a child/children, divorce, remarriage, size and composition of families, attitude to become a family and changes in the process of family formation overlap with the issues of family demography and, within this context this study intends to help better understand the changes in family formation in Bulgaria.

[3] While "*transition*" word is being used here, some adjectives such as economic, politic, cultural, psychological, and the like will not be used. Because, for both the author and this study; "transition" is an "*aggregate period"* which has included all institutional changes and developments as a whole.

This study starts with giving detailed information about the demographic developments from the communist period to the present. In the first place, it is necessary to discriminate social and demographic determinants of family formation in communist Bulgaria and in post-transition Bulgaria. Moreover, the discrimination provides the explanatory factors for the first assertion of this dissertation: The transition has been responsible for the prevailing demographic trends in Bulgaria which has been ongoing since 1989, to be precise, if this transition has not been realized; demographic trends would have never indicated the prevailing fundamental consequences.

Acting on this contention, two types of family models are used. One of these family models is the extra family model which refers to non-marital cohabitations and the increasing childbearing out of marriage and, the other is marital family which refers to marital cohabitations and the decreasing trend in marital fertility[4]. Therefore, the second assertion of the study is that transition has also a role which affects marriage patterns, childbearing and consequently family formation in the society. Thus, this study aims to contribute to explain the effects of social and demographic developments on family formation, especially in the first decade of the transition.

In the light of historical-demographic developments before 1989 and on the colorful scene of post-transition period, the target concern of this dissertation is to develop an argument on social and demographic determinants of family formation in Bulgaria by measuring Bulgarian couples' intentions to have a(nother) child. While doing this, the study makes use of the UN's criteria: A family nucleus is of one of the following types (each of which must consist of persons living in the same household):

a) *A married couple without children,*

b) *A married couple with one or more unmarried children,*

[4] In the study, the concepts- non-marital cohabitation and marital cohabitation- of the data of FFS-Bulgaria are used in order to prevent a possible conceptual confusion.

c) A father with one or more unmarried children or

d) A mother with one or more unmarried children.

e) Couples living in consensual unions should be regarded as married couples[5].

Marital cohabitation is a union which represents an essential social group in the society typically consisting of two parents and their children (but not necessarily mutual children). Specifically, it is supposed that there is an official marriage among the parents. Non-marital cohabitation, as a concept, refers to non-married couples referring to the fifth criterions above. The couples living in both marital cohabitations and non-marital cohabitations, their intentions to have a(nother) child and, their attitudes to marriage and divorce account for the focal points of the analysis.

In other words, family formation process is oriented toward the marriages and the intentions of childbearing of the couples in post transition Bulgaria in order to evaluate recent situation of marital cohabitations in comparison with non-marital cohabitations. Although it is exact that crude marriage rates have decreased sharply and crude divorce rates have risen, it can be easily claimed that young Bulgarian people much less prefer to marry than their parents, or for them, divorce is easier. According to Census-2001 results, just in the period of 1999-2001, 30 percent of marriages ended in divorce and the number of families dropped by 170.000.

The main question of this study is "What are the social and demographic determinants of family formation in post- transition Bulgaria?" It is hardened by one supplementary question which needs to be examined for the past and present: "Do women have intention to have a(nother) child?" Such an approach facilitates to understand whether there is a meaningful correlation between the social and

[5] http://unstats.un.org/unsd/demographic/sconcerns/fam/fammethods.htm#A2

demographic factors and woman's desire to motherhood and consequently, support to the previously mentioned assertions of the study.

The second demographic transition theory, which is the pursuer of modernization, accounts for the demographic scope of the issue. It is important to give meanings to the changing demographic trends in pre- and post-transition Bulgaria. Ideational shifts incorporate social, cultural, ethnical and even social psychological characteristics of the demographic changes. Economic sphere of marriage and childbearing requires for economic explanations of the demographic events in these processes. Mainly, the studies of Van De Kaa (1987, 1994, 1999, 2002) and Lestheaghe (1998, 2000a, 2000b) help to interpret the changes in demographic trends in Eastern Europe and in Bulgaria. Easterlin's (1978, 1985, 2004,) and Becker's (1991a, 1991b, 1992, 1993, 2004) studies on the economic approaches to marriage and childbearing are especially mentioned in this study. The Bulgarian situation is assessed within the frame of these theories.

It is observable that marriage, childbearing and family formation are the issues which have historical, cultural and social depths in Bulgaria. Therefore, while preparing a literature survey, in order to obtain original information about the country, priority is given to the sources that can be collected from the Bulgarian institutions. The literature survey is made up of many written sources which have been published by various national institutions in this country, particularly in Sofia[6]. Publications of Max Planck Institute for Demographic Research in Germany, particularly which have included new points of view on the recent social-demographic developments in the Eastern Europe; have also served to improve information obtained from the institutions in Bulgaria. In addition to these sources, the literature survey is getting rich with some papers from the libraries of famous

[6] Most of them were obtained from Center for Population Studies, Bulgarian National Statistical Institute, Institute of Balkan Researches, National Library of Cyril and Methodus and UN offices, Association of Sociology and various academic departments in University of Sofia such as sociology, psychology and history.

scientific institutions in the world[7]. However, many individual studies have also been included in the literature survey.

As regards the data used for the analysis, it is scientifically well-known that family formation analyses are generally based on the variables of nuptiality and fertility which can be obtained from the surveys, censuses and/or private studies. Especially in the transition countries, due to financial problems of the governments, it is very difficult to obtain financial support for the large-scale surveys which are necessary to bring social and demographic issues into view. One of these countries is Bulgaria. For the researchers and scientists who have studies on transition countries, the most reliable data are national censuses and surveys supported by special units of United Nations; particularly the Fertility and Family Survey (FFS). Demographic background of Bulgaria is also examined by making use of the previous census results. In order to achieve reliable demographic trends that will put forth a difference, a development, an understanding between past and present; census results referring to the time period from 1945 to 2000s should be taken into consideration.

In this study data of Fertility and Family Survey (FFS-Bulgaria) that has been conducted in 1997 in Bulgaria is preferred to be used for two reasons: First, it comes across 1997 which is defined as *"the year of (almost) crash landing"*[8] of Bulgarian government. The country entered 1997 in the middle of a crisis of economic and political confidence. The consciousness of struggling for the "good governance" was also gained in this year. In other words, the year of the Fertility and Family Survey; 1997, is explained with the expectations and prospects of both the government and the people. Low living standards, a severe drop in prosperity, unpredictable economic environment left its mark on the time. Development seems impossible and *"survival" was the key-word for the whole of society throughout 1997*[9]. Indeed, 1990s are the real transition times because though there were severe poverty, unfamiliar economic conditions and social confusion in the country, everything

[7] Institut National d'Etudes (INED), British Society for Population Studies, International Union for the Scientific Study of Population (IUSSP), Harvard University and the like.
[8] A Headline from National Human Development Report.UNDP,1998.
[9] Human Development Report's approach to Bulgaria of 1997 (UNDP,1998)

started to change in the end of 1990s, especially after 1997. Secondly, the people living in Bulgaria, in particular the women had made their decision as regards family formation in the early times of 1990s, which was one of the important reasons of the accelerated decline in fertility and number of family: postponement of marriage and childbearing was necessary to arrange life in appropriate to the post-transition conditions. They preferred working and/or attending to training institutions to gain profession in order to cope with the bad straits, unemployment and poverty. The data content was examined and its structure which reflected the familial characteristics of the targeted period of time was found appropriate for doing a study on social and demographic determinants on family formation. It can be seen as the only field survey which perfectly presents the Bulgarian women's thoughts about fertility and, their attitudes to set up housekeeping with two parents or with one-parent in the times right after the transition. Therefore, data of the following surveys conducted in 2000s are not favored to study.

It should be noted that, this study does not aim to analyze the continuity of the relations from the Communist system to the present, the study is only interested in the family affiliations, childbearing and, preferences of the women among new living arrangements coming across 1990s. In other words, the basic interest of this thesis is related with the "post-transition term" and, its social and demographic extents determining family building strategies in the country.

Primary importance of this dissertation appears to be the method of approach to the changes in family formation in the country. It estimates family formation process within the framework of the behavioral differences and the tendencies of the women regarding marriage and family (descriptive approaches) and their intentions to have a(nother) child (multivariate approaches). Bulgaria is the only country in Europe which has experienced social and demographic transformations at the most quick pace. At present, Bulgaria is one of the Balkan countries that have the severe social and demographic problems, in particular, the gradually declining fertility indicators and disappearing traditional family union has inevitably taken the country into a

demographic doom, mainly after the transition. Hence, post-transition Bulgaria is preferred for this study.

Regarding the parts of the study, it includes 12 chapters. The second chapter following the introduction covers the literature survey which describes the scientific works regarding the social, economic and demographic developments in pre- and post- transition Bulgaria and the changes in the family building strategies in the country. The chapter 3, "Inventory of the publications" mentions the publications and documents given priority in the study and provides information about their authors and subjects. The chapter 4 presents the theoretical framework. From the demographic point of view, this chapter focuses mainly on three approaches: demographic, economic and social. The second demographic transition is the first approach, which is mainly explained with the postponement of marriage and changes in family formation. The economic approaches to fertility and family formation are also discussed in this chapter. The ideational shifts which are explained by the social, ethnical, religious and political determinants of the family formation are the other issues that have been handled in this chapter. The chapter 5 presents a framework on the arguments regarding the structure of Europe by comparing basic demographic characteristics of the East and the West parts of the continent. Then in the chapter 6 the indicators submitting the place of post-transition Bulgaria among the other post-transition countries and the other European Union accession countries are compared; Romania, Russia, Albania and Turkey are the selected countries to this comparison. Chapter 6 covers the background characteristics of the population of Bulgaria[10]. Chapter 7 is related with the data quality of Fertility and Family Survey-Bulgaria (1991). While discussing data quality, the positive and negative characteristics of the FFS Bulgaria are evaluated carefully. The chapter 8 includes methodological progression steps in the thesis by using also short theoretical accents. The "findings" starts in Chapter 9; it presents descriptive statistics on the background characteristics of the respondents. Chapter 10 includes the detailed descriptive analysis on the

[10] It benefits from United Nations Statistics, the statistics supplied by Census Bureau and Council of Europe, census results and estimates supplied by National Statistical Institute, statistical and socio-demographic information provided by the Institute of Population Researches and historical demographic information made available by the Institute of Balkan researches.

women's attitudes to marriage by their birth cohorts, marital status and educational levels. The statistical results obtained from the logistic regression and decision tree methods employed to the women's intentions to have a(nother) are interpreted in chapter 11 and chapter 12, respectively. The last chapter is the conclusion in which an overall evaluation of the family formation in post-transition Bulgaria is presented.

CHAPTER II. LITERATURE REVIEW ON FAMILY FORMATION IN BULGARIA

In this chapter the focus is in general on the studies on family formation in the post-transition countries and in particular family formation in Bulgaria. Since experiencing the -so-called- economic transition and then becoming a post-transition country brings out typical characteristics, the social scientists; particularly the economists and the politicians studied the "transition countries", at a large extent, however, not many on the changes in the family formation strategies.

The postponement of parenthood and declining fertility rate have given rise to a large body of research on the decision making of couples with regard to having children and family building. The literature review on these issues demonstrates that most of the studies used quantitative methodology. However, studies on qualitative research which will help to enrich the understanding are almost missing. Longitudinal surveys on family formation that will enable to understand the decision making processes of the couples, especially in the low-fertility countries like post-transition Bulgaria are non-existent as well.

The widespread studies of the international institutions publishing the national reports that have multi-dimensional contents on the developing countries are extremely necessary, especially in order to collect good information about the background characteristics of the examined society. Therefore, the national reports of UN having various dates and rich contents are carefully examined for this study with the aim of collecting information about social and demographic events and family forms in post-transition Bulgaria. Moreover the reports and/or electronic connection points of the some international institutions are checked out to find the supportive evaluations and figures. There are many national surveys which are internationally supported and "Fertility and Family Surveys in countries of the ECE region: Standard country report" (Philipov, 2001) is one of them.

Partnership and the reproductive behavior patterns have undergone major shifts over much of Europe and North America during the past three decades, leading to the coexistence of a variety of family forms. This country report sheds some light on the development of fertility and partnership formation in Bulgaria. It provides a deeper understanding on the subject by measuring possible explanatory factors.

The important written sources of the well-known demographers such as Van de Kaa (1987, 1994, 1999, 2002), Lestheage (1998, 2000), Easterlin (1978, 2004), Easterlin and Crimmins (1985), Lindert (1980) and Becker (1991a, 1991b, 1992, 1993, 2000) which include social and economic approaches to fertility and childbearing and, Philipov's studies (2000, 2002a, 2002b, 2004) which evaluate fertility, childbearing and family formation in the transition countries by using various points of view, are the special references of the theoretical framework of this dissertation.

In addition to the theoretical sources, the studies which have special subjects of the well known scientists and new generation researchers are overviewed. One of the new generation researchers is Koytcheva (2006) from University of Rostock, Germany. She prepared a Ph.D dissertation on "Social-demographic differences of fertility and union formation in Bulgaria before and after the start of the societal transition" in 2006. While she is studying on Bulgaria of before and after the transition she mainly benefits from the data from the 2001 census and data from the 2002 Social Capital Survey for the complementary analyses and focuses on the changes in fertility behavior and family formation in the country. She ends her study with those words:

> *"Our results give us evidence to believe that in the case of Bulgaria, during the larger part of the 1990s, the horse of economic crisis during the larger part of the 1990s, the horse of economic crises was pulling much more strongly than the horse of the cultural changes. However, it seems that the second horse is gathering speed and it will be not surprising if the near future it is the one playing the bigger role*

pulling the cart of demographic changes in Bulgaria" (Koytcheva 2006).

Number of the individual studies completely focused on the family formation matters in the country is quite few. Therefore Koytcheva's recent study is very important to form an opinion about the recent demographic changes in the country. Besides, for this dissertation four studies which are just focusing on the demographic changes in Bulgaria are used to obtain original information about family formation and family structure in post-transition Bulgaria, as follows: Sougareva (1986) discusses the social role of the child in contemporary Bulgarian family by examining the parent's desire for children and their reproductive behavior. Belcheva (1994) wrote "We and our children" in 1994 by using data derived from National Statistical Institute and the personal data. This publication includes a sociological study and it covers 2000 observations referring to the parents of 6-14 school aged children. It inquires about Bulgarian parenthood, treatments of parents within the family and children in view of parents. In 1998, Yachkova (1998) from the Foundation of "Education, Science and Culture" prepared "The family and how to prepare for it" supported by UNESCO and FELISSIMO (Japan), which includes research and descriptive analysis on preparation for family and marital life-essence, factors, social orientation. On the other hand, Vassilev's (2005) study on "Bulgaria's demographic crisis: Underlying causes and some short-term implications" mentions the major reasons for the population implosion in Bulgaria.

Unquestionably, Bulgaria as a post-transition country generally becomes one of the model countries of the comparative studies. Undoubtedly, the comparative studies are extremely important to describe typical changes in demographic events in the post-transition countries. Therefore, also this study incorporates a separate effort in order to understand the typical changes in the socio-demographic events in the post-transition countries. According to the comparative studies, post-transition Bulgaria experiences the similar changes -political, economic, social, cultural and demographic- with the other transition countries but at the same time, it is a country which has the most dramatic and profound statistical indicators among them.

Therefore, "The demographic transition in Eastern and Western Europe: A comparative analysis" (Jedege and Stubbs, 1997); "Fertility in times of discontinuous societal change: the case of Central and Eastern Europe" (Philipov, 2002); "Pathways to step family formation in Europe: Results from the FFS[11] (Prskawetz et all, 2002) "Children's experience of family disruption and family formation: evidence from 16 FFS countries" (Andersson, 2002); "Understanding lower and later fertility in the Central and Eastern Europe" (Sobotka, 2003); "Fertility intentions and their timing: theory and evidence from Bulgaria and Hungary" (Philipov, Spéder and Billari, 2004), are the important sources, discussing the importance of changes in fertility and descriptive variables of family formation in post-transition Bulgaria in comparison with the other transition countries.

In addition, European Foundation for the Improvement of Living and Working Conditions (EFILWC) did the "First European quality of life survey: Families, work and social networks (EQLS) in 2005. The survey data compares the patterns of family formation across countries as well as across gender and economic circumstances. According to the full report of the survey, the biggest differences across countries and country groups are found among young people and older people. Among young people (18-35 years), three patterns of family formation emerge and Bulgaria is among the countries including in the second pattern. The second pattern refers that around half of young people under 35 years of age (particularly men) are still living in the parental household without a cohabiting partner. More women (35-60 years) than men live with their partners with/without children or live un-partnered with/without children (EFILWC, 2005).

Philipov's (1999) academic-empirical researches leave its mark on Bulgarian demographic literature and especially the demographic changes in Bulgaria. "Family formation and the impact of the totalitarian regime" inquires the impacts of totalitarian social order on fertility and family building in Bulgaria. "A demographic forecast of the Bulgarian population 1996-2020" summarizes the recent situation of

[11] It includes information about 18 FFS countries but does not talk about the FFS results of Bulgaria, however, it provides considerable information about the typical demographic changes in post-transition countries.

the Bulgarian population with the projections for twenty four years. (Philipov, 1999); "Fertility and Family Survey in Bulgaria" which is the main source of this dissertation is one of the most important studies reflecting the fertility patterns and women's attitudes to marriage and family building in the post-transition term. "Social capital related to fertility: theoretical foundations and empirical evidence from Bulgaria" (Philipov, 2005) bases on a large scale survey and examines the fertility behavior of the Bulgarian people by using questionnaires prepared for women and men separately. These are the key studies guiding to this dissertation.

In conclusion most of the studies on family formation in post-transition Bulgaria are the comparative researches across the European countries. On the other hand, there are some small scale studies collecting information with the small sample sizes. But, at present, these are not considered as reliable studies in terms of their results and contents. Therefore while doing a literature research, the study has especially preferred to use comparative studies including Bulgaria and well-known scientific studies either entirely on post-transition Bulgaria or on the other transition countries.

CHAPTER III. INVENTORY OF THE PUBLICATIONS

Keywords: Transition, marriage, family, family formation, marital family extra-family, childbearing, extra-marital childbearing, fertility decline and divorce.

Literature survey mainly rests on publications of the scientific institutions preparing many statistical works and data on economic, social and demographic transformations in Bulgaria. Particularly "national institutions" which generally works with Bulgarian statisticians and other members of the natural and social sciences in collectivity are preferred in order to introduce a strong structure for the literature survey. The scientific activities and works of five national foundations have been followed carefully: Institute of Balkan Researches, Center for Population Studies, National Statistical Institute, National Library of Chyril and Methody, UNDP Offices in Sofia. In addition to the national sources it also is based on the publications of international institutions and scientists. Especially, international publications of INED, IUSSP (Paris); NIDI (Netherlands) Harvard University (USA) and Oxford University (GB) become auxiliary sources for this work.

Institute of Balkan Researches is an institute searching historical developments, particularly on history of Ottoman Empire and its relations with Bulgarians. The institute has not produced demographic sources. However, annual journals have interesting articles on historical demographic dimension of family patterns in Bulgaria. Also interviews with the academic staff provide many new opinions on socio-demographic and historical developments in Bulgaria.

Center for Population Studies was officially established in 1991. However, it is said that it was "*Institute of Demography"* in the communist term and closed in the transition term. At present, interestingly, there is not any written source belonging to communist term in its library. It has some books on population issues and technical demography, which are used in demography education and published journals since 1991. Some researches on family that have very small samples could not be found appropriate enough for the work.

Journal of Populations published annually are prepared mostly in Bulgarian. Just five articles were found very useful for this work and used by translating in English: Kostova's (2000) *"Family forms and reproductive attitudes in Bulgaria"* in *Journal of Population, 2000* develops new arguments on changing family formation and reproductive behaviors within families. *"Does the marital family model die out?"* written by Yachkova (2001) and published in *Journal of Population* examines changing family model in Bulgaria. "*Reproduction attitudes and childbearing stimuli"* by Zhekova (2001) is a statistical work on new reproduction attitudes in Bulgarian family. "*Demographic factors for a change of the economically active population in Bulgaria"* by Borisova (2001) analyses economically active Bulgarian population by years, age and sex. *"The youngest mothers in Bulgaria: Demographic and social-economic characteristics"* prepared by Chalakova and Dodunekova (2003) is a study on early marriages and its social economic determinants. *The second demographic transition in Bulgaria* written by Pamporov (2003) cites the problems in the stage of Second Demographic Transition in Bulgaria.

The National Library has old and new publications on Bulgarian family. But their number is not enough to do an effective study on family formation. The library provides some books and articles having generally socio-psychological and sociological points of view: One of these books is *"A national analysis of Bulgarian family"*. It includes a research on Bulgarian family and private problems affecting the children. Its author is Kojuharova (1992) and it is in Bulgarian. *"Socio-economic factors effecting fertility and motivation for parenthood"* written by Morsa (1975) compares the results of various surveys carried out by various researchers from different European countries. It is also important study to evaluate fertility behaviors and economic determinants of family formation in Europe. *"We and our children"* written by Belchewa (1994) from National Statistical Institute was published in 1994. The book announces results of a sociological research on Bulgarian family. Trends characterizing the parents' participating in their childrens' spare time, the degree of intimacy between them; trends characterizing the parents as educators; trends characterizing the family environment; trends characterizing the parent's personality; trends characterizing the child; trends characterizing the family

resources are some of the tabulations it includes. The book has provided also demographic outcomes particularly on declining birth rate. Therefore it is an ideal source to have an opinion on family formation in Bulgaria.

Undoubtedly, the most important of the sources is *Bulgarian National Statistical Institute (NSI)* which has been producing national statistics since end of 19th century. Today it is still only institution in Bulgaria counting the population, collecting data and producing the most detailed statistics on Bulgarian population. The institution counted people living in North Bulgaria in 1880 firstly and then East Roumelia census in 1884 was the second census. Bulgarian people were counted completely in 1887. Census has been continued so far. However, time-intervals between one census and the other are not equal due the governmental and/or financial reasons. The last census was held in 2001 in Bulgaria.

It has also many publications on special subjects such as fertility, family, family planning, mortality, migration, breastfeeding, economic development and the like as well as census books and yearbooks. Due to limited computer services in National Statistical Institute, all the publications except books, relating to problematic of this work, were selected carefully and copied.

"Statistical yearbook, 1990" (NSI, 1990) is a special publication including statistics of 1880-1989 time periods, too. It has many chapters indicating details on this work's subject such as marriage, live births, deaths, marriage ceremony by months, marital status of the spouses before marriage, births by age of mother, births by age groups of the parents, plural births by sex, years and place of residence, divorce rate by years, divorce by age, causes of divorce by sex, divorce by education, time before divorcing by number of years and number of children as well as basic demographic indicators and events. Following Statistical Yearbooks (*2000, 2001, 2002*, *2003)* have a common format: Population by census years, current population, fertility, mortality, marriage rates, life expectancy at birth by period, distribution of the settlements by size and number of population at the end of the year, population of the cities with more than fifty thousand inhabitants, population density, population

by age and sex, population by working-age status, marriages, live births, deaths and natural increase of the population, live births, deaths and natural increase of the population by residence, marriages by age of bride and bridegroom, marriage by marital status of partners, births (live births and still births), legitimate births by mothers age and fertility, live births by parents' age, registered abortions in health establishments by kind, deaths by age and sex, deaths by causes, age and sex, infant mortality, divorces by age of the spouses in 2002, divorces by reason and fault in 2002, divorces by duration of marriage and by number of children in 2002 are available for this work.

Economic experiences of both Bulgarian government and people have to be known well for understanding core of the transition. For this purpose, "*Statistics on main macro-economic indicators, 1989-2002"* (NSI, 2002) is an important source because of its expanded contents on Bulgarian economic development. It has presentations which reflect economic situation of Bulgarian society by type of ownership, by economic sector, by economic activity groupings, by institutional sector, and cross-classified by institutional sectors and by economic activity groupings by region. The publication is very beneficial because of its retrospective feature.

"Fertility and family planning in Bulgaria" (NSI, 2003) presents state, trends and problems of birth rate in the republic of Bulgaria. The analysis hereby is the mainly on data of the latest census of the population from March 2001 and the concomitant representative study on birth rate and reproductive behavior. Moreover, it includes information on previous censuses of population, regular demographic and social statistics.

"Family in Bulgaria by the results of census 2001" is based on statistics of the latest census, too. Stages in family development, development of families by districts, family types, number of family members, and number of children in families are some of the analysis. Families by residence, number of members, type of family, number of children, age of head of family, are presented under the sub-title of

"Family according to the censuses". There are some further analysis examining Bulgarian families by religious characteristics to ethnic groups, too

United Nations Offices has also many written sources which include national information on Bulgaria as well. *Bulgarian Common Country Assessment* (2000) was prepared by the United Nations Country Team (UNCT) and by the supports of United Nations Development Programme (UNDP), the World Bank, United Nations High Commissioner for Refugees (UNHCR), United Nations International Drug Control Programme (UNDCP), the World Health Organization (WHO), International Labor Organization (ILO), United Nations Population Found (UNFPA), Joint United Nations Programme on HIV/AIDS (UNAIDS), United Nations Children's Found (UNICEF). United Nations Economic Commission for Europe (ECE), United Nations Environmental Programme (UNEP), United Nations Educational, Scientific and Cultural Organisation (UNESCO), Food and Agricultural Organization of the United Nations (FAO) participated in the CCA process. It presents an overview of the country's development situation and at the same time, it's a review of development data and literature. It is also an important source to see the economic developments in Bulgaria between 1991 and 2000. Economic security in the Country is evaluated by presenting Bulgarian key economic indicators and sectoral progresses by years. Unemployment and employment by age, sex and sectors and employment rates in 1991 and 1999 are also presented with the tabulations. The publication also gives opinion about policy challenges for economic security, community security, poverty dimensions and educational system in Bulgaria. It has also many socio-demographic indicators and recommendations on demographic developments in post-transition Bulgaria. It uses an academic perspective and it is very beneficial to notice all economic details directly affecting the persons, the couples and their life styles.

Human Development Index: Municipalities in the context of districts, Bulgaria, 2002 notes that human development in Bulgaria is marked by differences between the relatively advanced districts and those lagging in the development. There are important differences in the level of development of neighboring municipalities

within the same administrative districts (UNDP, 2002). Bulgarian authorities and local administrations have been challenging with the sub-regional differences for being accepted to European Union. This publication discusses economic developments by relating them with districts/municipalities. It's useful to evaluate regional socio-economic developments.

National Human Development Reports published by UNDP (1998, 2000, 2001, 2003) are also trustworthy UN sources on Post-Bulgaria. Theme of National Human Development Report, 1998 discusses the dilemma of "The state of transition and transition of the state?" At first it mentions *"Role of state in the economy: regulation or de-regulation?"* It defines problematic of having a transition economy, too. It also evaluates *"The society in transition: coping with survival"*. Incomes, consumption dynamics, employment, surviving strategies, education, health care, social changes, social policies and human development, development of private sector are revised. *"Society in transition: coping with itself*" includes the expressions on the transition and family patterns. Changing family patterns in Bulgaria are questioned in terms of gradually disappeared patriarchal traditions. Finally, *"The state in transition security: changing patterns"*, mainly talks about social security by explaining dynamics of the dependency ratio (DR) and replacement ratio (RR).

"National Human Development Report, 2000: The municipal development" that is one of the annual publications of UNDP (2000) presents the human development in municipal Bulgaria and, "*Human Development Index: Municipalities in the context of districts (2002)* analysis physical features and socio-economic administrative potentials of the districts in Bulgaria. *"Citizen Participation in governance, from individuals to citizens"* is the explanatory headline of *National Human Development Report, 2002.* It's mainly about development of citizen participation in Bulgaria. Family relations and gender equality is evaluated as a pre-requisite for citizen participation. The publication has clues on the family relations and decision making strategies within a Bulgarian family. *"National Human Development Report, 2003: Rural regions; overcoming development disparities"* (2003) benefited for this study, analyzes characteristics of rural regions and it has

three perspectives: First, the underdevelopment of rural regions is examined as an aspect of, and reason for regional and social disparity in Bulgaria. Secondly, the report discusses the *"place of government and non-government institutions in rural development"*. Thirdly, the report analyses the role of European Union (EU) accession in mainstreaming rural regions in Bulgaria's overall development. Rural people and their choices they have in terms of income, health, education, and governance to achieve a decent standard of living. *Demographic profiles of rural development, education and culture in rural regions, healthcare in rural regions* are important sub-tittles of the report.

"Millennium Development Goals, 2003" (UNDP, 2003) is the first national report on the achievement of the Millennium Development Goals (MDGs) for Bulgaria. The national targets regarding each of eight goals are announced with new expectations about future development of Republic of Bulgaria by 2015. The report, at the same time, has socio-economic and demographic trends.

Yachkova (1998) from the Foundation of Education, Science and Culture prepared *"The family and how to prepare for it?"* and this study explains the results of a research project supported by UNESCO and FELISSIMO (Japan). The first chapter "*The family as a social phenomenon: Essence of the family-concepts, definitions, theories"* argues the conceptual and theoretical developments of the family formation in Bulgaria. The theoretical framework uses functionalist point of view. It includes discussions on the pre-conditions of building a family, marital life-essence, factors, and social orientation.

Family and Fertility Survey (Philipov, 2001), Bulgaria was carried out in December 1997 by a team of scholars at the Bulgarian Academy of Sciences. It's directed by Dimiter Philipov who was working in the Max Plank Institute for Demographic Research (Dimiter Philipov, at present, works in Vienna Institute of Demography). The respondents are women aged 18-45 and hence born between 1952 and 1979. The sample size is 2367. The report of this survey is a good guide for this study.

Todorova (1997), the Bulgarian historian, wrote *"Imagining the Balkans"* criticizing the arguments on Balkans. Todorova's (1983, 1993) *"Population structure, marriage patterns and household (According to Ottoman documentary material from north-eastern Bulgaria in the 60s of the 19th century)*", *"Balkan family structure and the European Patterns: Demographic developments in Ottoman Bulgaria"* are the important sources demographically examining the family models in national history of Bulgaria. In addition to these, Miteva's (1999) *"Bulgaria: transition towards a market economy and direct foreign investment",* Christian Giardano and Dobrinka Kostova's *"Bulgaria: a land reform without peasant"* include the recommendations on socio-cultural, politic and economic crisis in Bulgaria.

Bristow's (1996), *"Bulgarian economy in transition"*, analyzes basic economic indicators of Bulgaria during the transition. *"Bulgaria in a time of change: economic and political dimensions"* written by Zlochy -Christy (1996) discusses the socio-political problems of changing Bulgarian society.

One of the studies that have sociological approaches to Bulgarian context is Krateva's (1998) *"Communities and identities in Bulgaria"*. Creed's (1997) *"Domesticating revolution: from socialist reform to ambivalent transition in a Bulgarian village"* published in 1997 is another sociological research. In 2000s, *"Recent social trends in Bulgaria, 1960-1995"* worked by Genov and Kristeva (2001) and, *"An introduction to post-communist Bulgaria: political, economic and social transformations"* by Giatzidis (2002) point out historical and sociological experiences of pre- and post-transition Bulgaria.

The Bulgarian demographer Philipov's (1992, 1998, 1999, 2000, 2002a, 2002b, 2004) studies are the fundamental sources of this dissertation. He has numerous publications on his country and contributed to many works on demographic cycles in all the transition countries in Central and East Europe as well as Bulgaria. The *"Recent methodological developments in population forecast and applications in Bulgaria"* (Philipov, 1992) is published by Institute of Demography, Bulgarian

Academy of Sciences. "*Family formation and the impact of totalitarian regime"* (Philipov, 1999) and *"A demographic forecast of Bulgaria Population, 1996-2020"* leave their marks on Bulgaria of 1990s. The former reveals the problematic characteristics of family formation process in Bulgaria during the totalitarian regime and the latter brings up to date the demographic profile of the Bulgaria population with the projections. "*Case study: Bulgaria"* (Philipov, 2002) is on the socio-economic problems of Bulgarian community. "*Low fertility in Central and Eastern Europe: Culture or economy?"* (Philipov, 2002b) is a comparative study that presents possibility of doing mutual comparisons among the transition countries in Central and East Europe. With Dorbritz (2002), the "*Demographic consequences of the transition in countries in central and Eastern Europe"*; with Hans-Peter Kohler (2001), the *"Tempo Effects in the Fertility Decline in Eastern Europe"* and, with Opara (2002), the *"Population Development in Bulgaria"* include demographic analysis and evaluations, especially on traumatic fertility decline in the Central and Eastern countries. In 2002, Philipov had great contributions to "*Fertility and Family Surveys in Countries of the E.C.E. Region. Standard Country Report, Bulgaria"*.

Max-Planck Institute for Demographic Research is one of the most esteemed research institutes of Europe and of the world. Under its roof, there are many well-known demographers and young demographers and it hosts numerous working papers, books and articles. *"Pathways to Step family Formation in Europe: Results from the FFS"* (Prskavetz et all, 2002) and *"Fertility in times of discontinuous societal change: The case of Central and Eastern Europe*" (Philipov, 2002a), *"Low fertility in Central and Eastern Europe: Culture or economy?"* (Philipov, 2002b), *"Fertility intentions and their timing: Theory and evidence from Bulgaria and Hungary"* (Philipov, Spéder and Billari, 2004) are four of the comparative studies and include discussions on reasons and consequences of fertility decline in Europe and family formation in these countries.

Jedege and Stubbs's (1997) *"The demographic transition in Eastern and Western Europe: A comparative analysis"* is used as a strong step for this work. Because it examines changes in mortality and fertility trends between Eastern and

Western Europe and then compares them by using conceptual clarification, it can make simpler to explain basic demographic differences between two sides.

Also "Developments in Eastern Europe and the Former Soviet Union, Present and Future" written by Kingkade and Dunlop (1996) is a work which examines The Eastern European countries in terms of worldwide effects of collapse of Soviet Union. It is important because it revises typical consequences of the transition in Eastern Europe which covers Bulgaria.

Vassilevs's (2005) *"Bulgaria's demographic crisis: Underlying causes and some short-term implications"*, which is exploring the major reasons for the population implosion in Bulgaria" has strong ideas about Bulgaria's near future. It defines Bulgaria's demographic crisis as a "disastrous situation" and tell the demographic details of it. On the other hand, working document of Trenchev (2005) from EU-Bulgaria Joint Consultative Committee tells the practices of population policy of Post-transition Bulgaria in details. *"Demographic trends and challenges to the demographic policy of Bulgaria"* has a critical approach at the same time.

CHAPTER IV. THEORETICAL APPROACHES TO FAMILY FORMATION AND THE BULGARIAN CASE

The post-transition countries have common features: All of these countries experienced an economic uncertainty, cultural shock and social cohesion since their social formations were not as flexible as Western nations had. Because of the stronger historical, economic (strict communist principles), social, cultural, traditional and also religious differences, all of the transition countries still cope with ongoing effects of the transition which create new living arrangements. However, many of the new living arrangements and their unavoidable effects on the society have not been socially approved since 1990s, because they include more different forms than the previous social structure have had.

According to Surkyn and Lestheaghe (2000), the preparatory reasons of the social changes spreading out the developing world and the recent situation of household formation can be explained with the following developments in the West:

> *"Secularization of the reduction in religious practice, abandonment of traditional religious believes, and a decline in individual sentiments of religiosity…. Effects of the "new political left"; distrust in institutions and anti-authoritarianism…. Egalitarianism… Unconventional civil morality and ethics…Accentuation of expressive values, showing an enhanced preoccupation with individuality and self-fulfillment…companionship and unconventional marital ethics, stressing the quality of relationship (communication, tolerance and understanding, good sexual relationship) over the conventional and institutional foundations of marriage and parenthood, and the toleration of deviations from strict marital morality (Lestheage and Surkyn: 2000)"*

So, the values have to deal with these six developments. Surely, these developments refer to the rules of modernization and social institutions have suffered

a substantial decline in its human importance, in particular, family (Ruigrock et all, 1996). Families have gradually lost their individuals and their traditional functions. As Lestheaghe and Surkyn (2000) mention, family decline brings about self-fulfillment and egalitarianism to a society.

The developing countries which meet face to face with the principles of modernization have gradually experienced social confusions like the transition countries for a long time. However, there was a difference: while transition countries gradually experience the social transformation and deal with the modernized values, they come up against a different and stronger challenge. Definitely, in all the transition countries, this unexpected rapid transformation harms family upwards of the slow modernization process. One of them is Bulgaria and this chapter aims to constitute a theoretical background for understanding the Bulgaria's challenge regarding family formation.

Philipov (2001, 2002) uses three points of view to form a theoretical background:

a) Second demographic transition as the demographic scope
b) Economic sphere of marriage and having children
c) Ideational shifts

According to the general sociological approaches, all events are just the natural (expected) results of the modernization. In demography, the "First Demographic Transition" is emphasized within the modernization process because of its indirect determinants: industrialization, urbanization and secularization. These three processes refer to the shift explaining with the reducing economic utility of children. The "family-based" society started to loose its importance. As for the "*Second*

demographic transition (SDT)[12]", in 1965, it was explaining with the "individualistic" approach and the latest changes in the family formation (Van de Kaa, 1987 and 1999; Lesthaege and Van de Kaa, 2002) such as the emergence of the union dissolution, and new forms of family reconstruction in the Western nations afterwards the Second World War. With regard to the economists, family building and childbearing are completely related with the "costs" and/or the woman's new status in labor force which make her an income earner, gain her economic freedom and empowerment of making decisions on her own. For some social scientists, they are just social and demographic developments which all countries have already experienced and will experience some day; the fertility transition is becoming universal phenomenon, in which every country may be placed on a continuum of progress, whichever stage they are at.

IV. I. a. The second demographic transition as the demographic scope

The starting point of the Second Demographic Transition Theory was North-Western Europe in 1960s then it was spread out all Western countries. It includes transformation of culture, social norms and values, strong individualization, the change of values affecting gender roles.

Demographically, it has sharp indications:

a) Rising age at first marriage

b) Postponement of fertility, rapid decline in period total fertility rates.

[12] The historical fertility transition is explained by two well known processes in literature of demography: *"The first demographic transition (FDT)"* and *"The second demographic transition (SDT*)". The first demographic transition was characterized by increased fertility control and as a result of that decline in fertility at older ages (Lesthaeghe: 2000). On the other hand the cause of this transition has been sought in the reduction of the death rate by controlling epidemic and contagious diseases. While contraceptive efficiency was increasing with age (Colae and Trussel, 1974), marriage duration prolonged (Lesthaeghe: 2000). Also declining mean age at childbearing and mean age at first marriage was recorded in Western countries. The second demographic transition is the second stage of demographic developments in these countries. A major contrast between the first and the second demographic transition is the different evolution in nuptiality. The second stage is characterized by adoption of efficient contraception at early ages and therefore postponement of parenthood (Van de Kaa: 1999; Surkyn and Lesthaege: 2000; Lesthaeghe and Neels: 2000; Lesthaeghe 2000). Ongoing postponement of marriage results in declining fertility by age 30. Period fertility rates decline below the replacement level (Lesthaeghe 2000).

c) Increase in pre-marital and post-marital cohabitation

d) Rising divorce rates

e) Decline in age at first sexual intercourse (Van de Kaa, 1987; Lesthaege, 1998; Surkyn and Lesthaeghe, 2002; Lesthaeghe: 2000a, 2000b)

The SDT's indications have been observed after 1950s in Eastern European countries because of many developments taking place after the Second World War: Extensive industrialization, labor participation of women, anti-religious ideology, improving health and education system, rapid urbanization brought about falling in fertility. In addition, according to Sobotka's approach, increase of divorce rates, decline in the age at marriage and childbearing and two-child family form follow these developments. The communist state has always been patriarchal and traditional. The women were responsible for childrearing and house works and such practices hindered freedom of women and deprived them of social and economic opportunities. The high fertility rate, early transition to marriage and childbearing, very low childlessness and proportion of never married people and marked inclination to two-child family model are the major characteristics of the Eastern European countries (Sobotka, 2000).

As one of these countries, in Bulgaria, right after the announcement of Western democracy understanding and liberal rules in 1989; the dramatic changes in social and demographic trends have started to be recorded:

a) Quick decline in period total fertility rate (below the replacement level)
b) Considerable postponement of marriage
c) Considerable postponement of childbearing
d) Increase in number of cohabitation before marriage
e) Increasing teenage fertility
f) Rising control of fertility
g) Smaller number of children and rise in childlessness
h) Increase in divorce rates and termination of cohabitations
i) Rising two-income unions

and consequently;

j) Changes in family formation behavior

Surely, all are the indications of SDT in West European countries. The causes of the late-differentiations in the post-transition countries are surely the communist policies reserving housing for married couples, motivating female labor force participation, and eliminating unemployment, produced stable living conditions which subjected to earlier marriage (Lesthaege, 2000; Philipov, 1997).

For about fifteen years, in post-transition Bulgaria, change in family formation behavior has been continuing as a result of the rapid changes in the other nine factors above. The exact rise in sexual relations at early ages, increase in the non-marital cohabitations and extra-marital fertility (Philipov, 1999), which have not objectionable features traditionally and; the rising image of the strengthened woman in the world of business, which is not acceptable for the patriarchal look, have brought about postponement of marriage.

According to Lesthaeghe's point of view; the rise of the share of non-marital fertility is not connected to the events of 1989 because this share has been already rising since mid-1970s. But the pace of the contraceptive learning curve (typically before age 20), postponement of marriage, high teenage fertility, adoption of new living arrangements must be considered as the signs of declining fertility prior to age 30. (Lesthaege, 2000a; Lesthaege and Moors, 2000). This general postponement of parenthood is the hallmark of the SDT (Lesthaege and Moors, 2000). However, although Lesthaeghe and Moors (2000) suggest that the extra-marital fertility should not be considered as a fact rested on the transition period (and although it always exists and acceptable), exactly observable increase in number of extra-marital fertility should not be paid insufficient attention. Sobotka also mentions that a *radical* transformation of fertility and family patterns has begun after the collapse of the state-bureaucratic systems in 1989-1991. These transformations were so powerful that they considerably changed the demographic map of Europe within a short time (Sobotka, 2003).

After 1990s, family building strategies have been determined in the light of the recent social, economic and cultural transformations. Decline in fertility rates and increase alternative living arrangements such as cohabitating with children, cohabitating without children, living alone, lone mother and resident in the parental household (Lesthaeghe, 2000) have weakened possibility of marital family building. But in Bulgaria as in many East European countries, pregnancy still seems a pre-requisite of marriage. Especially birth of the first child can persuade couples to marry (Philipov, 2000).

So far expressions signify that, SDT's indications were observing in Bulgaria in the early times of communist regime. Although some of them, such as rising contraceptive use, fertility and extra-marital births existed before the transition, the pace of the decline in these indicators is more dramatic after the transition. So, Bulgaria which began to experience SDT before the transition came to another demographic turning point in the beginning of 1990s as regards the dramatic decline in fertility rates and the changes in the family building strategies.

IV. I. b. Economic sphere of marriage and having children

While Lestheaghe is developing a theory on the study of family formation, he constitutes a theoretical model based on three international trends:

1) The *theory of relative economic deprivation* (Lesthaeghe, 1998; Easterlin, 1978, 2001).

2) the *theory of increased female economy autonomy* (Lesthaege, 1998 and Becker, 2004)

3) the *theory of ideational shifts* (Lesthaeghe, 1998). Even if Lesthaege (1998) does not mention it, *the theory of allocation of time*[13] is a significant part of these theories, especially, of Becker's idea of "economics imperialism". *The ideational shifts* are going to be examined in the following section because of its social and political contents.

Easterlin's theory of relative economic deprivation (2001) implies that there were less favorable employment and career opportunities in 1970s in response to high consumption aspirations of cohorts, particularly reaching adulthood. This was creating a tension which caused the SDT (Easterlin, 1978; Lesthaeghe, 1998, 2000a) *Becker's neo classic economic theory* suggests that *the opportunity costs* associated with household tasks and with bearing and rearing children increased (Becker, 1993; Lesthaeghe, 1998).

Becker (1992) simply indicates that in marital decisions, people want to make the most appropriate choice to become happier than ever. When their choice disappoints them, they normally want to break up their marriage to stay single or look for another partner. This behavior pattern is adequate to explain potential trends of family and fertility decisions.

> *"The cost, time, money, energy and emotion of raising children are all components of the economic cost of having children and they*

[13] The analysis of the behaviour of firms and households is to some extent symmetrical: all economic agents are conceived of as ordering a series of attainable positions in terms of an entity they are trying to maximize... It is also the theory of consumer behaviour, but it also underlies the theory of money, of capital, and of international trade. Economics furnishes a technique for thinking about decisions, regardless of their character... Every decision involves a "production function" and a "utility function"; the equimarginal principle is then invoked to provide an efficient, optimal strategy....The general application of economics in unfamiliar places is associated with American economist Gary Becker, whose work has been characterized as "economics imperialism" for influencing areas beyond the boundaries of the discipline's traditional concerns. In such books as *An Economic Approach to Human Behavior* published in 1976 and *A Treatise on the Family* published in 1981, Becker made innovative applications of "rational choice theory." His work in rational choice, which went outside established economic practices to incorporate social phenomena, applied the principle of utility maximization to all decision making and appropriated the notion of determinate equilibrium outcomes to evaluate such noneconomic phenomena as marriage, divorce, the decision to have children (http://www.britannica.com/eb/article-236768).

also effect benefits in terms of pleasure from children " (Becker, 1992).

Becker (1991c, 1992, 1993) adds that traditionally, benefits refer to the old-age supports and this type of behavior also can be explained by economic approaches.

According to the neo classic view, female economic autonomy allows for the dependency (Lestheage, 1998). The increase of married women in the labor force and of well-educated women causes them to earn dependency from the traditional (mostly patriarchal) handcuffs of household formation and economic security.

At this point, it can be talked about the *theory of the allocation of time* which suggests that in the countries at the stage of industrialization, the relationship between fertility and female labor force participation will be mostly inversely related. Further, the theory implies that the wage rate and job opportunities in the labor market will influence decisions about childbearing. The increase in married women's labor force participation provides substitutes for the wife's time at home, and consequently it has lowered the costs of fertility control (Grossbard-Shechtman, 1984).

An individual's market wage rate is determined by personal characteristics and characteristics of the labor market in which she is located. The price of a married woman's time tends to be positively related to husband's income, household assets, the woman's education level, and the number of children, and negatively related to the ages of children. Traditionally, the birth of a first child withdrew the women from the labor market to engage in child care. However, since four decades before this pattern has been abandoned; now more than half of mothers of infants under the age of one are employed in the labor market (Klerman and Leibowitz, 1999).

Easterlin model (1978, 2004) incorporates Becker's earlier work resting on *demand for children* and tries to develop a model that would be compatible with the approaches to fertility used in other disciplines. He emphasizes three categories: 1)

demand for children (the number of surviving children parents would want if fertility regulation were costless) 2) *the supply of children* (the number of surviving children parents would have if they didn't deliberately limit fertility) 3) *the costs of (subjective and objective) of fertility regulation* (Easterlin, 1978, 2004 and Becker, 1991b, 1993). Easterlin's basic model incorporates the demand for children if fertility regulation is free (Cd), the supply of children, if natural fertility is ongoing (Cn) and costs of fertility regulation.

Following Becker (1991b, 1993), a couple's demand for children is considered as the demand to goods and services. In particular, demand depends on household income, and on parents' tastes or preferences for children relative to other goods and services that provide utility to the couple.

While other things equal, higher income are expected to increase the demand for children. According to this view, children are a kind of good. However, greater demand for children can be correlated with having greater recourse endowments per child. In that condition, demand for children is not simply a demand for increasing number of children. Higher income has been often explained as increased demand for quality rather than simply increased quantity. So, "demand for children" and "child services" can be placed into such a frame. "*Treatise of the family*", Becker's (1991a) last publication includes an analysis of the demand for children and suggests

> "*...the analysis is extended to consider the interaction between quantity and quality of children, probably the major contribution of economic analysis in fertility. This interaction explains why the quantity of children often changes rapidly over time even though there are no close substitutes for children and the income elasticity of quantity is not large." (Becker, 1991a)*

The cost of children does not simply relevant to direct costs of goods and services that are complementary for children. The value of parent's time is rising as well as an increase in cost of having children (Becker, 1992, 2004). So, it also

significantly relevant to *opportunity cost of mother's time spent in child care*. Therefore, "quality" of children is affiliated with differences among women in the opportunity cost of time.

Economic development pulls women out of the home, giving them a greater sense of control over their lives, greater *access to contraceptive information*, and a heightened sense of earnings they stand to lose by having children (Lindert, 1980). The c*ost of fertility regulation* (Becker, 1991a) is another matter of demand for children and known as a couple's attitudes toward and access to fertility control methods and supplies. There are two types of costs of fertility regulation: 1. *Physic costs*. 2. *Market costs* (Becker, 1991a, 1991b, 1993). Physic costs refer to the displeasure associated with the idea of fertility control and the latter refers to money and time costs necessary to buy and use specific contraceptive use.

If potential supply exceeds the quantity of children demanded, couples begin to have motivation for fertility regulation. It's time to consider about costs of fertility regulation at the same time. The greatness of the motivation of fertility control directs couples to select the most appropriate and cheapest contraception. In such conditions, family planning programs can drop fertility by reducing both the physic costs and the market costs of contraception.

Are both Becker's approaches to fertility and family, and Easterlin's (1978, 2001) "relative deprivation" and "demand-supply of children" approaches used to constitute a theoretical framework of family formation in post-transition Bulgaria? After 1990s fertility rates which is already low before the transition has fallen by "lowest-low" values in post-transition Bulgaria. In this context, the initial cause of that is the growth of woman labor force participation exceeding man. Most of young women achieve the opportunity of attending secondary schools and universities in spite of the high unemployment rate. Most of young women and men prefer to be educated in professional areas to find a good job and earn sufficient money. Apart from men, women labor force can be easily noticed in post transition Bulgaria easily

and consequently they spent much time in work. So, the time allocation for the house work and childbearing/childrearing is getting harder.

Further, the inadequate income level and poor life conditions in the country are also hindering fertility decisions. Therefore marriage rates have fallen speedily and people prefer to form different unions such as lone mother, cohabitation with or without children, living alone. The recent economic conditions do not allow them to have children; event to demand for children, or to cope with the "cost of children" of new one. Now, opportunity cost of parents; particularly of mothers is more valuable than in previous period and "quality" of children is based on women's time spent in work.

Physic costs have not been current in post-transition Bulgaria except less number of fundamentally religious persons. However, due to impoverishment, unemployment and high inflation, which are obstructing to select, buy and use the most appropriate contraceptive, market cost is very important. Women who have higher socio-economic status are more cautious about buying and using the right contraceptive method. They can select, *buy* and spend *time* to use it.

IV. I. c. Ideational shifts

The theory of ideational shifts is interested in long term trends of SDT: rising individual autonomy in ethical, religious and political domains (Lesthaeghe, 1998). For Easterlin and Crimmins (1985), basic determinants of fertility incorporate also underlying socio-economic conditions, in other words, modernization variables. Education, urbanization, modern sector employment, cultural (ethnicity and religion) and genetic factors are the basic modernization variables. These variables determine fertility behavior by affecting demand for children, supply of children and/or costs of children. (Easterlin, 1978, 2001; Lindert, 1980; Philipov, 2001) Religious and ethnic factors, language, region, degree of urbanization or size of place of residence are the primarily socio-cultural. (Morsa, 1978). For instance, simply, couples can be affected by their close-relatives, neighbors or close-friends that have a certain number of children and generally economics does not say anything about that, because these are

relevant to level of tastes and completely cultural. However, for many social scientists, their role in differentiating trends with regard to the number of children must be generally said to be weakening.

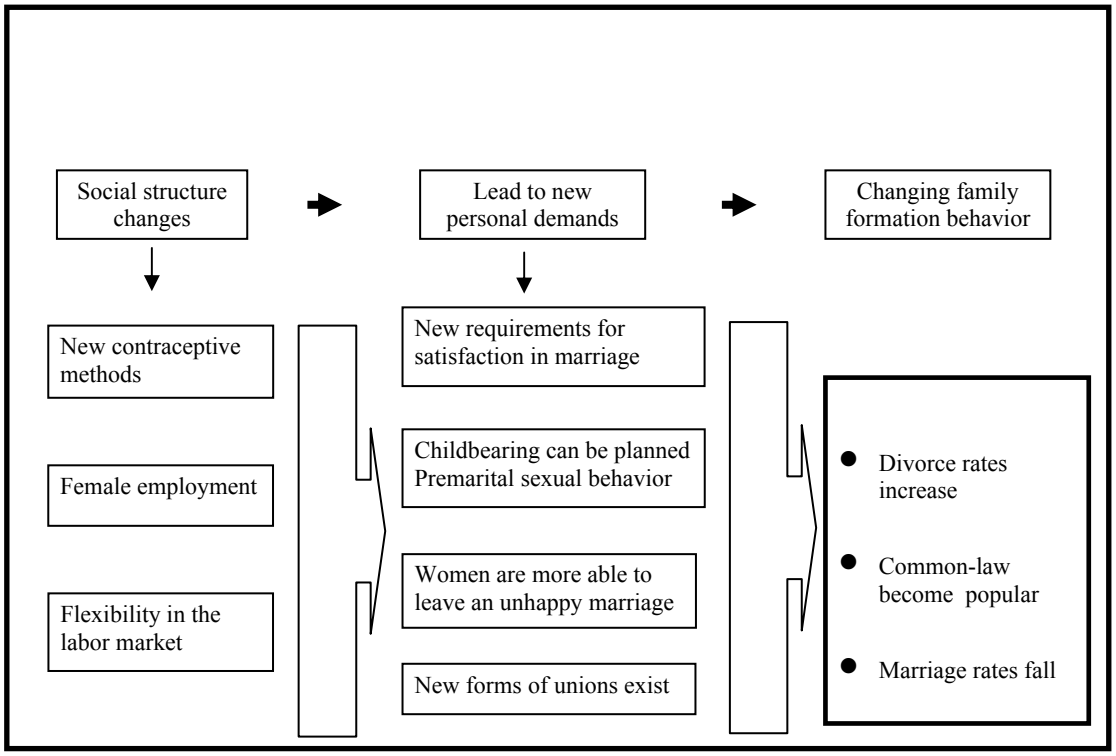
Social and cultural approaches have also mentioned as *"ideational shifts",* such as changes in norms, values, attitudes that cause consequential behavioral modifications. Cultural aspects, like habits and traditions may have an impact on fertility change; however, it has really difficult to fix their effective role on fertility due to loss of information in many countries. In 1980s, Lesthaeghe and Van de Kaa study on demographic changes in Western European and other developed societies. According to them, these factors have a long standing effect and develop for many decades and even centuries. Secularization, rising female autonomy, rising expressive individualism are among the most relevant ones. They contribute to a lessening pressure of traditional norms pertaining to high fertility. (Van de Kaa, 1994, 2002). This assumption is a part of SDT approach and female autonomy and secularization are also components of modern social structure. Female autonomy rose due to the significant increase in the working women.

> *"The theory of ideational shifts also predicts higher divorce rates and subsequent post-marital cohabitation not only on grounds of weakened institutional support, but even more directly into a cost-benefit calculus and because the "quality standards" of marriage have increased. Individual fulfillment or self-actualization and the give-and-take requirements of marriage are not easily reconciled (Lestheaghe, 1998)"*

Increasing quality of the standards of marriage have completely abrogated traditional family and contributed to its transformation into the Western family structure which has modern values. Martin et all (2004) draw a scheme (Figure IV.1.) showing the transitions into family formation changes. This scheme serves to the ideational approaches as well.

The social structure changes take place with three progresses: new contraceptive methods, female employment and flexibility in the labor market. Social structure changes lead to new personal demands which incorporate new requirements for satisfaction in marriage planned childbearing, premarital sexual behavior, terminating of unhappy marriage and new forms of unions. All bring about the expected change: completely different family formation behavior than in the past, which is determined with increase in divorce rates, common-law's popularity and falling marriage rates.

Figure IV.1. The relationship between the social structure changes and family formation behavior



Source: Martin, Mills, and Le Bourdais (2004)

In Bulgaria, as in other Eastern European countries, secularization, rising female autonomy, rising expressive individualism are the main impacts of ideational shifts (Philipov, 2002).The ideational changes have accelerated after the transition. During the totalitarian regime long-term secularization, individualist manner and female autonomy already exist but the latter is not perceived as much as now, even

ongoing fertility decline (Philipov, 2002). Surely, main cause of this situation is the population policy of the totalitarian regime. So, because of transition, new living arrangements and new forms of social-psychological attitudes are more perceivable and pace of fertility decline disconcerts everybody.

Transition to marital family generally results from the first birth; but, in the main, marriage is not a need to have children. Here, the only point which has changed after transition is the sharp increase of illegitimacy of both marriage and having children. Teenage fertility is another social problem for the future of traditional understanding of family in the country.

Indeed, the impacts of the second demographic transition on Bulgarian family formation are not very different than in the other East European countries. Overall changes in life and society have been still observed. However, only when the statistical indicators related with the demographic issues of the country are taken into consideration, it can be seen how alarming they are.

CHAPTER V. ARGUMENTS ON THE SOCIAL AND DEMOGRAPHIC INTEGRITY OF EASTERN AND WESTERN EUROPE AND THE TYPICAL CHARACTERISTICS OF BULGARIA AS A POST-TRANSITION COUNTRY

V. 1.a. Demographic Integrity of Eastern and Western Europe

In general it is considered that identities of the "West Europe" and the "East Europe" account for a strong integrity, however, it does not take a long time to notice that the historical, political, economic, social and demographic gaps between two sides even as a result of small-scale research. So, "W*hat kind of structure has Europe?"* This question may have many explanations in almost all scientific frameworks. But, aim of asking this question here is just to find out causes of social and demographic *"gaps"*, especially showing differences in fertility, childbearing and, marriage which has been accepted as a preparatory stage and/or a legal stage for *family formation* in almost everywhere of the world.

Carmen Faus-Pujol identifies Western Europe as outer or peripheral Europe while Coleman discusses the changing boundaries of Europe with the break up of the former Soviet Union (Jedege and Stubbs, 1997). It is really difficult to find a social definition for this famous continent except its well-known geographic definition. However, intention of this part is to compare trends in fertility and mortality between Western and Eastern Europe in order to see whether a transition from a Soviet style-government to liberal principles of a market economy has serious effects on these three basic demographic indicators. Jedege and Stubbs (1997), from University of Derby, Department of Geography, did that and presented the results during a demography conference in Germany.

> *"With regard to classifying Eastern Europe as a whole, it may be taken as being Bulgaria, Czechoslovakia (currently, the Czech Republic and Slovakia, (former) East Germany, Hungary, Poland and Romania. Not only are these countries physically located in the eastern part of Europe, they have all previously exhibited centrally planned economies*

and belong to Warsaw Pact group of countries... As an economic unity, characterized by having essentially market economies is the Economic Union of currently 15 countries… Two other countries, Norway and Switzerland, while not in EU, have always been geographically, politically and economically part of Western Europe and so should also be included as part of Western Europe (Jedege and Stubbs, 1997)."

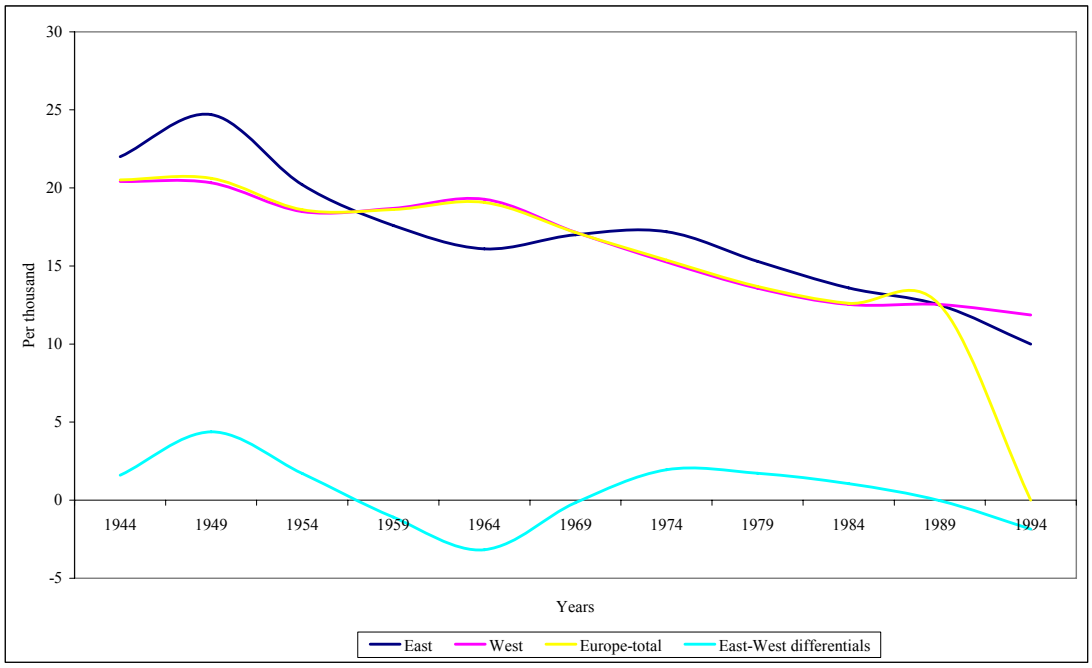
Box V.1.1. The composition of Eastern and Western Europe (1950-1990) by classification of Jedege and Stubbs

Western Europe	Eastern Europe[14]
1 Austria	1 Bulgaria
2 Belgium	2 Czechoslovakia
3 Denmark	3 East Germany
4 Finland	4 Hungary
5 France	5 Poland
6 West Germany	6 Romania
7 Greece	
8 Ireland	
9 Italy	
10 Luxemburg	
11 Netherlands	
12 Norway	
13 Portugal	
14 Spain	
15 Sweden	
16 Switzerland	
17United Kingdom	

The classification showed in Box V.1.1 was used for analyzing the demographic gaps between West and East Europe, which had occurred among fertility and mortality rates. CBR and CDR were preferred because of their simple calculations in other words, because of lack of data needed to calculate more complex indicators.

[14] The authors'classification reflects the economic and political the order of European countries and the perspective of mid-1990s. At present, the counties like Litvania, Latvia, Estonia, Moldovia can be considered for the countries which account for Eastern European Countries.

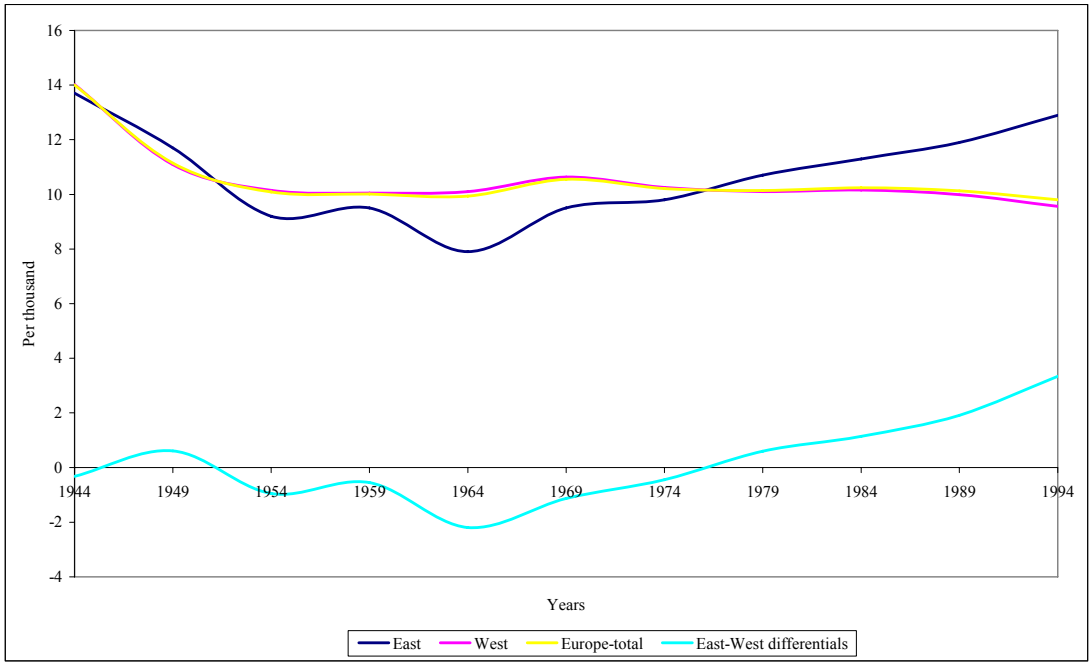
Figure V.1.1. Crude Birth Rate, East and West Europe, 1944-1994



Data Source: Jedege and Stubbs, 1997

The analysis done by Jedege and Stubbs (1997) included years from 1932 to 1994. However, since 1944 (Preparatory stage of Communist system), 1989 (Transition period) and 1994 (Post-transition period) were the economically, politically, socially and demographically significant points of the East European societies, five year intervals preferred and showed in Figure V.1.1. It is shown in the figure that crude birth rates were generally higher in Eastern than in Western Europe in the periods 1944-54 and 1969-1989. (Jedege and Stubbs, 1997) The intersection points of East-West and Europe-total can be accepted the sign of gradually falling fertility in the West and the starting point of the rapid decline for the East and numerical effects of the declining fertility in the East on the Europe total. The sharp decline in the Europe-total, which was occurred immediately after 1989, should be taken into account. Actually, this considerable decline can be named as “failure of the pronatal policies” in the East Europe.

Figure V.1.2. Crude Death Rates, East and West Europe, 1944-1994



Data Source: Jedege and Stubbs, 1997

Higher death rates were recorded in Western than in Eastern Europe for most of the period. Indeed there was a reversal of that trend from 1930s to 1950s (Figure V.1.2). The sharp decline in crude death rate in Eastern Europe between 1953 and 1974 could be considered as a result of curative effect of industrialization and development of health services. Between 1976 and 1994, there is a gap which has rather widened however; Jedege and Stubbs (1997) want to demonstrate the considerable developments in mortality after 1980s[15].

> *"Although the statistical test of difference carried out on the crude death rates shows that East-West gap in death rates is not statistically significantly for most of period, the growing mortality gap between regions especially since 1980s is particularly worrying (Jedege and Stubbs, 1997)."*

[15] Because of statistical tests for East-West equality in the mean crude death rates: (Wilk's Lambda) U-statistic and Univariate F-ratio with 1and 13 degrees of freedom.

It is clear that both parts of Europe show a general trend: Fertility and mortality rate have been gradually falling. Perhaps, as Jedege and Stubbs (1997) consider, this is the most appropriate situation for social integration in the continent. However, growing gap with respect to fertility and mortality; mortality rate which has an upward trend from 1980s to 1990s and fertility rate which has a downward trend speedily at the end of 1980s, should be considered as the results of characteristic effects of transition.

As for family motives in Europe; three changes which can be described as the preparatory social and demographic factors of a family formation process were quite common for the most of European countries in 1970s:

a. the spread of modern methods of birth control;
b. the increase in employment of women, giving them economic independence;
c. the growing personal end economic independence of young people in terms of making a decision about the life style and the future (Roussel and Festy, 1979)

Fertility trends show that reproduction and living arrangements in Eastern Europe particularly between 1970s and 1980s, an increasing contrast between these regions and other parts of Europe has attracted attention. According to Sobotka (2003) this contrast has been determined by the difference between relatively ordered life courses in the East and increasing disorder in the life courses in the West.

> "*The former communist countries of Europe have many contrasting features in terms of their cultural diversity, history, religious tradition, social structure and economic development, including the major cultural fault between Catholicism and Christian Orthodoxy which delineates the traditional East-West division of Europe" (Sobotka, 2003).*

In mid-1900s many Western societies were pronatalist. The deliberately childless were regarded as maladjusted, immature, unhappy, unfulfilled, lonely, selfish, immoral unhappily married, and prone to divorce. But since sex role attitudes were explained as one of the most important cause of increase in number of voluntarily childless couple, parenthood has not expressed as a result of conventional sex roles in marriage (Keilman, 1987). On the other hand, divorce rates have increased markedly from the early 1960s.

Jean Stoetzel wrote in 1954:

> *"For more than a thousand years, the institutional structure of the Western family has remained the essentially same: parenthood is bilateral, marriage remains monogamous and the family group invariably consists of the married couple and their children"*[16]

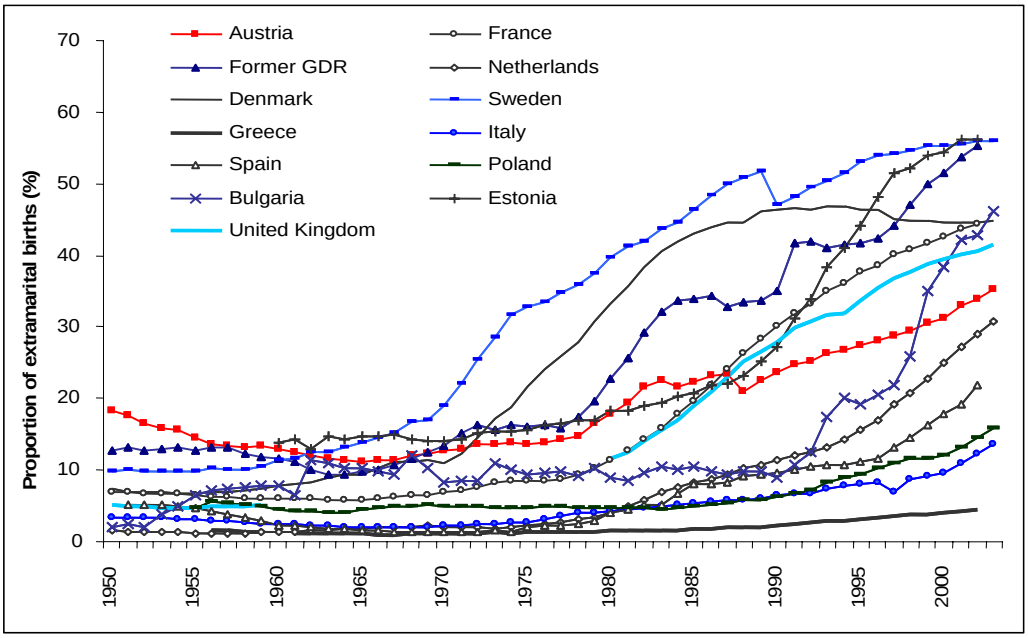
Stoetzel, in the same article, talks about fundamental alteration of family patterns in time after the Second World War. After twenty-five years Russel and Festy (1979) from Council of Europe prepared a report on *"Recent trends in attitudes and behavior affecting the family in Council of Europe member states"* in Strasburg. The member states which supplied available data for this work were Austria, Belgium, Cyprus, Denmark, Federal Republic of Germany, France, Greece, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey and United Kingdom.

The study emphasizes changes in marriage patterns, rise in number of cohabitation of unmarried couples, lifetime celibacy, divorce rates, extra-marital fertility and childbirth, especially after 1965. According to the report, sexual activity was not serving to reproduction anymore and young people entered into sexual relationships at an increasingly early age. Therefore in the societies which have Western values, these relationships have brought about a rise in number of cohabitations and as a result of efficient use of contraceptive methods and partly

[16] Jean Stoetzel, "Les changements dans les fonctions familiales" in "Renouveau des idees sur la famille". Travaux et Documents, No: 18. pp. 343-369 .

increasing recourse to abortion extra-marital fertility has been decreasing in most countries. However, in United Kingdom, Denmark, France, Switzerland, and Sweden, because of social acceptance of cohabitation and childbirth out of wedlock, extra-marital fertility has been growing rapidly (Roussel and Festy, 1979).

Figure V.1.3. Changing family context of childbearing in Europe: Rising proportion of extra-marital childbearing, 1950-2000



Source: Sobotka (2005)

Figure V.1.3 is related with the increase in extra-marital births in thirteen European countries (Sobotka, 2005). In Denmark and Sweden, cohabitation is widespread among young people and pace of extra-marital childbearing in these countries is remarkable from mid-1960s to the present. Although ideal norms stated that non-married couples should not have intercourse, behavioral norms did not reject premarital sex. In fact in Denmark and Sweden premarital sex has never been such a controversial issue as in other Anglo-Saxon world. Where strong norms exist against premarital sex, cohabitation is less likely to be accepted. Thus, in Denmark and Sweden the development of social institution of engagement and norms about premarital sex was very different from that in most other Western countries (Trost, 1988).

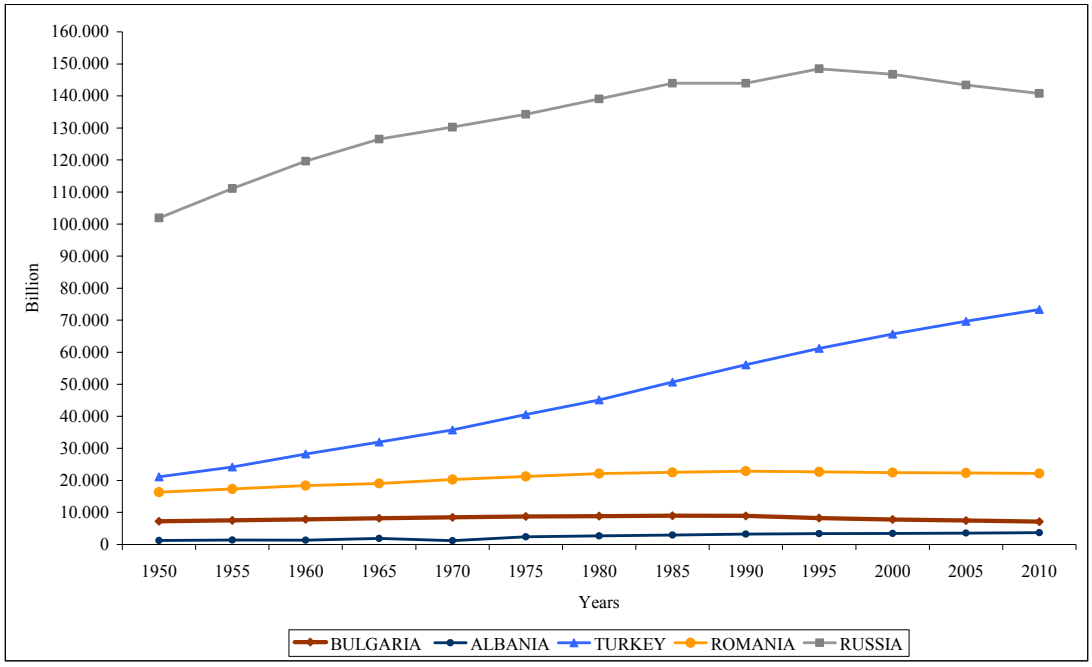
This collapse, for all communist countries, was a result of aim of becoming "a democratic society" and obtaining "liberalization" which is actually peculiar to the West and to the societies adopting Western practices. Westernized view of life has not seen family as a production unit for a long time and number of families with one or two children has been gradually increasing. Actually in Eastern European countries, changes in family formation have been growing slower than in Western European countries which have rapidly changing social values. Extra-marital childbearing has also part of Western modern family understanding and changing family context in European countries. Most probably, in Bulgaria and Austria, as in almost all Balkan countries, cause of acceleration in pace of cohabitations (Kostova, 2000) and extra-marital fertility is rapid diffusion of liberal values to all aspects of life right after the collapse of Communist principles.

V. 1. b. Bulgaria as a Post-Transition Country

Rapidly modernized Western countries still have been continuing to undergo a change in cultural and social structure. The factors that have differentiated the East countries from the West are the similarities between the Eastern countries in terms of cultural values, historical, economic and political developments and, religious traditions. The "connective" effect of communist regime, which can easily dominate over the individual life courses, was setting the standard for communist people's lives and because of these standard life styles, the scientists were drawing same portraits which had almost same sharp colors for the communist countries. But now a new political, economic and social transformation has been forcing them to rethink about their life standards and beliefs: The collapse of the communist power and announcement of free market economy refers to a "transition" in Central and Eastern European countries and, it was like a strong storm which has brought a different political dimension both to economic principles and to social structure speedily in everywhere it visited: Multi-party system announced its dominance and changed almost all laws and acts, *Comecon* (common market of the socialist countries) collapsed and the GDP decreased by at least 10 points in a short time due to economic uncertainty, social structure wrapped itself up in impoverishment (Philipov, 2002). Most of the people lost money and economic power and, got poor.

To asses the transition and its effects of demographic structure in post-transition countries well, four post-transition countries; Bulgaria, Romania, Albania and Russia were selected as explanatory models here. Turkey was also added to this analysis to see whether there is any different demographic development between a group of countries which have experienced a transition from communism to labor market economy and Turkey or not. Thus, it will be easier to describe a country which experienced a transition and to find an answer for "*Has Bulgaria similar demographic aspects with other post-transition countries?*"

Figure V.2.1. Populations of Albania, Bulgaria, Romania, Russia and Turkey, 1950-2010

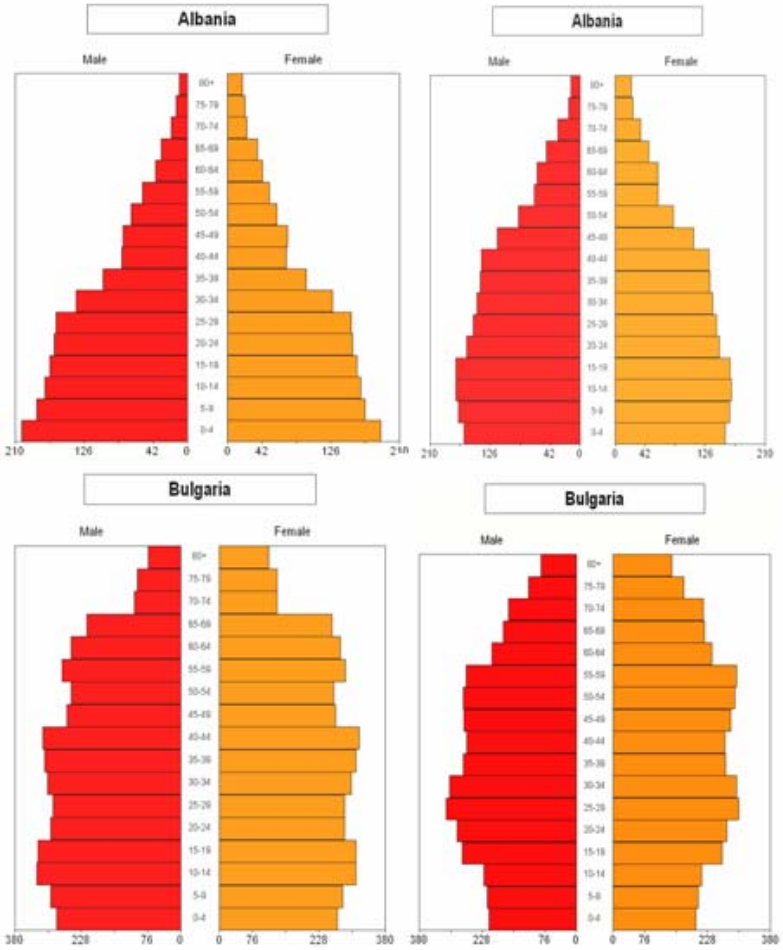


Source: Census Bureau International Data Base and UN World Population Prospects Data Base, 2005

Figure V.2.1 presents population trends in the selected countries for sixty years. The points referring to the population of the countries in 2010 year are the estimations produced by Census Bureau in 2005. Russian population is the largest population in the figure. Turkish population has been gradually increased from 1950s while Bulgarian, Romanian, and Albanian populations are reflecting almost standard populations from 1950s to 1990. It is exact that Bulgaria and Albania have faced with a serious loss of population since late 1980s, the beginning period of transition.

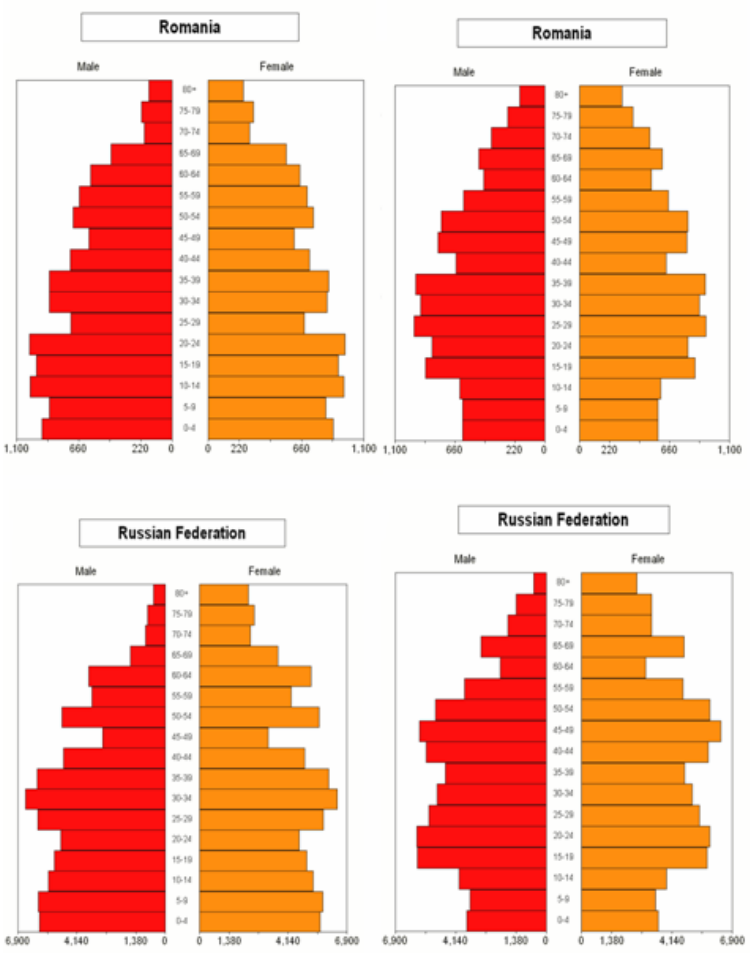
In Russia, which is disintegrated in the end of 1991 and as a country whose population density is higher than the others, population has been decreasing for the last fifteen years.

Figure V.2.2a. Population pyramids of Albania and Bulgaria, 1990-2005



Source: Demographics'96, NIDI and UNPA, 1996

Figure V.2.2b. Population Pyramids of Romania and Russia, 1990-2005

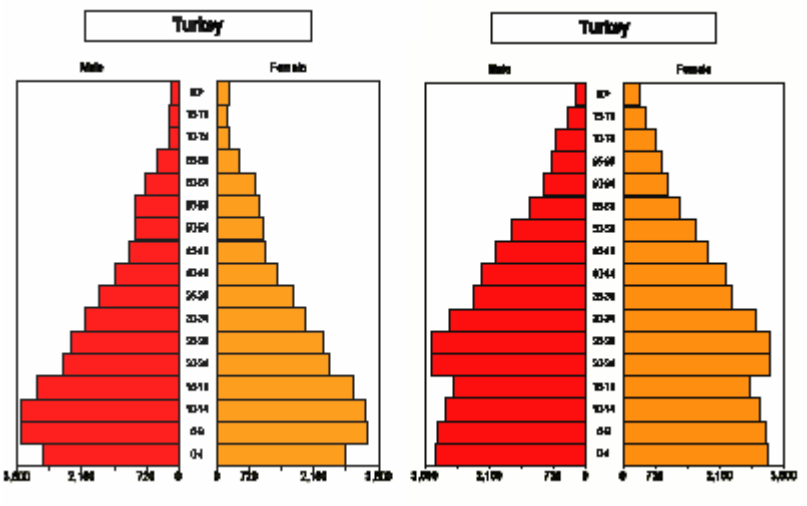


Source: Demographics'96, NIDI and UNPA

By the early 1980s, the fertility trends in the Eastern European societies cause a considerable convergence towards replacement levels; in the early times of 1980s, transition to replacement level was completed in almost all Balkan countries. In each of these countries fertility in the middle of 1990s was lower than in the early 1980s and consequently, their populations rapidly grew old.

The population pyramids (Figure V.2.2a, Figure V.2.2b and Figure V.2. 2c) of Bulgaria, Russia and Romania comparatively present speedily falling fertility rates and aging population from the early times of the post-transition to 2004. Albanian population has higher fertility in proportion to Bulgaria, Russia and Romania.

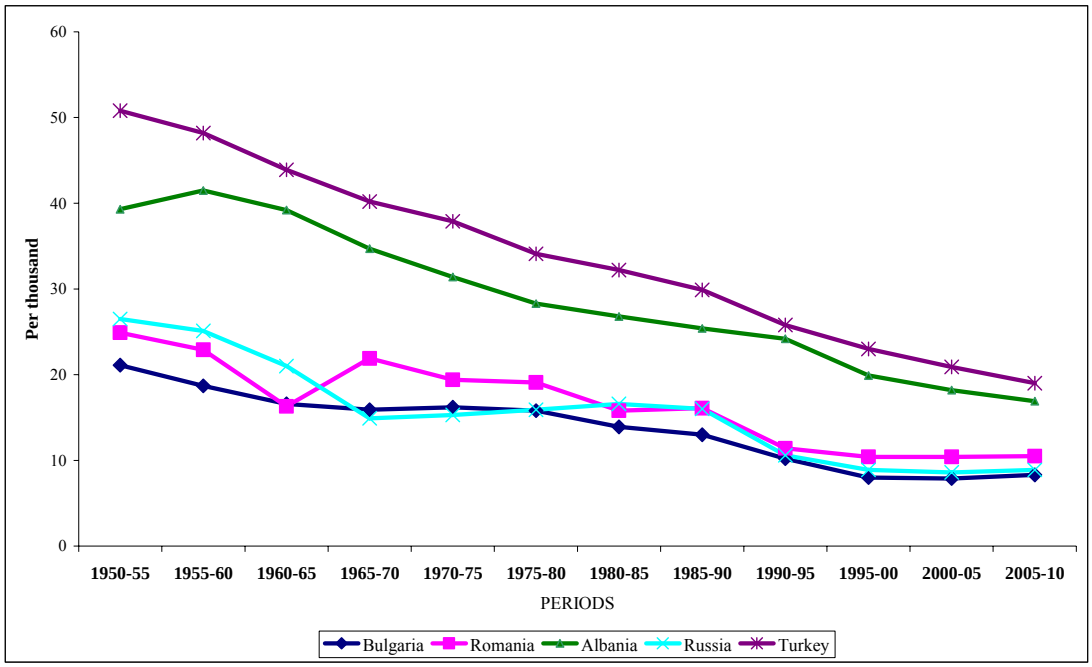
Figure V.2.2c. Population Pyramids of Turkey, 1990-2005



Source: Demographics'96, NIDI and UNPA

Turkey has still a younger population and higher fertility than the others. The truth of the matter is that the post-transition countries should be at the threshold to produce demographic reforms which will save their population from aging and loss of population, otherwise, the pyramids will continue to expand and a "demographic doom" will be possible in the near future.

Figure V.2.3. CBR in Albania, Bulgaria, Romania, Russia and Turkey between the periods of 1950-2010

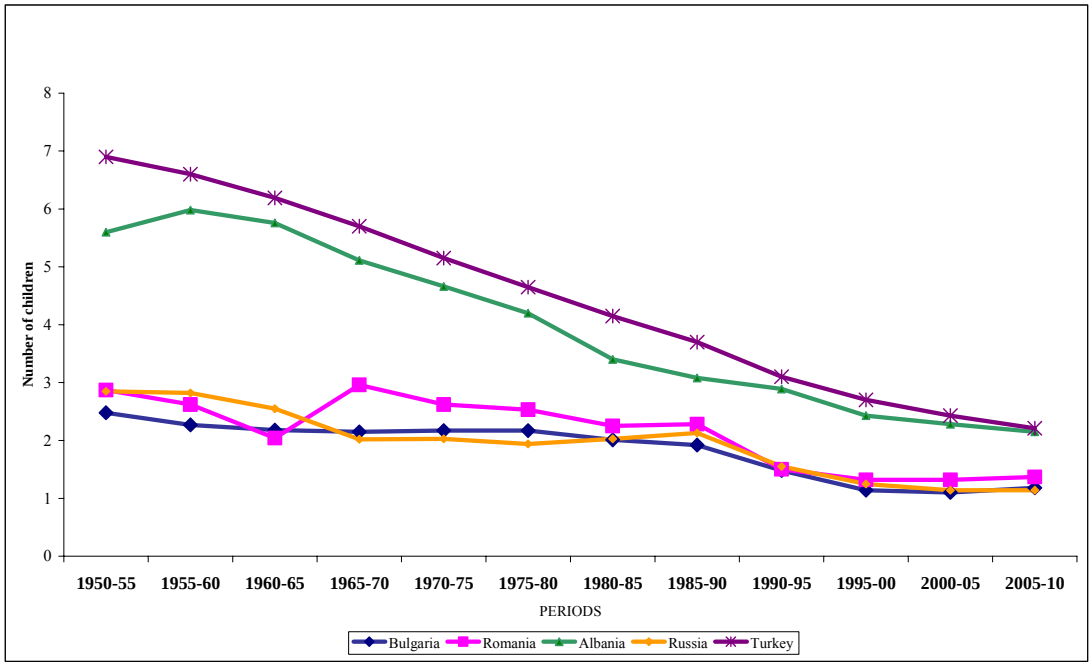


Source: Census Bureau International Data Base and UN World Population Prospects Data Base, 2005

As regards the fertility trends, Crude Birth Rate (CBR) has been declining in five countries (Figure V.2.3.). The resolute decline in CBR in Bulgaria (13 per 1000 population), Romania (11 per 1000 population) and Russia (16 per 1000 population) is suitable timely to the period of 1985-1990. The collapse of totalitarian regimes realized in the end of 1980s in these countries, as in most of CEE countries and, this collapse had also changed pronatalist population policies adopted before the transition. Bulgaria's and Romania's fertility decline share the common feature with those in the former Soviet Republics. In Bulgaria there was a gradual decline in 1980s but it considerably accelerated after 1988. In Romania, fertility peaked between 1985 and 1990, most probably as a result of the highly coercive pronatalist policies practiced in 1984. The rapid decline occurred in 1989. On the other hand, CBR (about 30 per 1000 in the period of 1985-1990) in Turkey have been declining in a more gradual trend than in the post-transition countries (Census Bureau, 2005).

Before the transition almost all post-transition countries have pronatal population policies. Figure V.2.4 indicates that Total Fertility Rate (TFR) was slightly above replacement level in some countries and Romania was among them (2.2) in mid-1980s. It was slightly below in the other countries and Bulgaria was one of them (1.9). (Macura, 1995; Macura, Kadri and Mochizuki-Sternberg, 1999). Recently, the pace of fertility decline has accelerated in a number of countries, most notably in Russia. In 1981 TFR for Russia was close to replacement level (2.2) and Communist Party adopted a pronatalist policy for seven years in 1988. Following this period the TFR entered into a declining period. TFR has been declining and it accelerated sharply after the breakup of the Soviet Union. Russia's TFR in 1994 was 1.4 and it was among the lowest in Europe (Kingcade and Dunlop, 1996). In for the period of 1990-1995 it was 1.5 but for 2000-2005 it is still one of the lowest values in Europe: 1.1 (Census Bureau, 2005).

Figure V.2.4. TFR in Albania, Bulgaria, Romania, Russia and Turkey between the periods of 1950-2010



Source: Census Bureau International Data Base and UN World Population Prospects Data Base, 2005

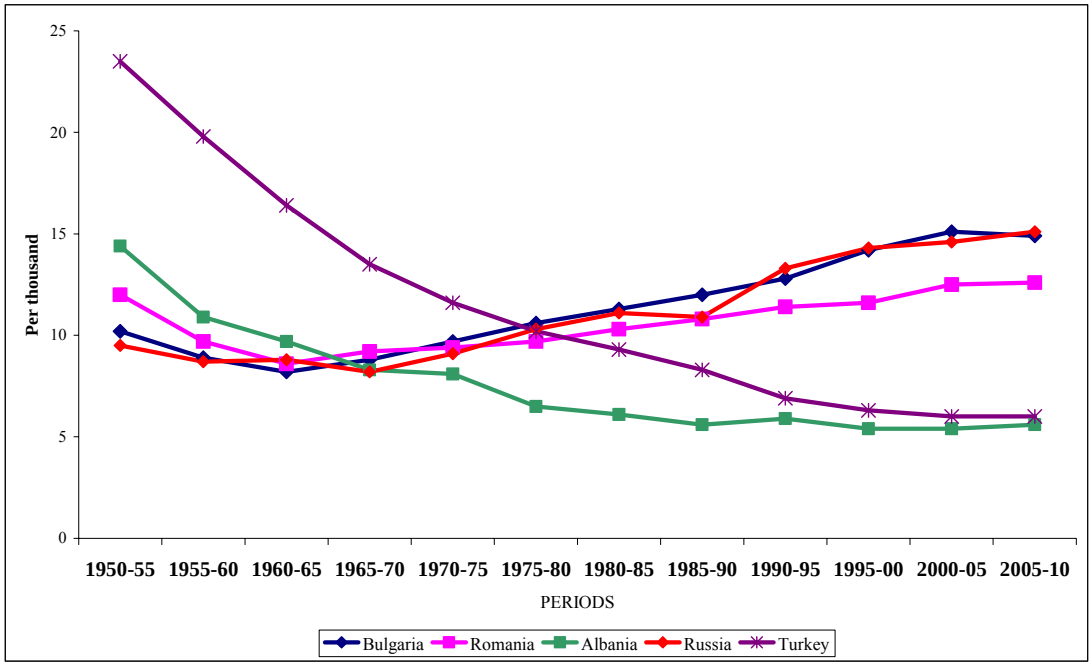
The first order TFR (TFR1) indicators are very close to unity in all the post-transition countries, the second order TFR (TFR2) is also very close to TFR1 values. So two-child model family is the most valid family model in post-transition countries (Philipov, 2000; Philipov and Kohler, 2001).

> "*These pronounced fluctuations in annual TFRs may reflect changes in spacing of births among couples in the childbearing ages rather than actual shifts in family size goals, as both the Russian and Western literatures suggest…*" [17]

The mean age at birth of the first child was also very low in all countries. However it has not changed during the transition period. In Bulgaria it was 21.9 in 1980, 22.1 in 1989 and 22.0 in 1991. At present, mean age at birth of the first child is around 23 in this country. In Romania, it was 22.4 in 1980, 22.6 up to 1995. After 1995 it has reached to 24 (Macura and Kadri and Mochizuki-Sternberg, 1999; Philipov, 2000). In other words, numbers of women who have wanted to complete their fertility behavior in early times of their reproductive ages have increasingly decreased in these countries during the first years of the transition.

[17] W. Ward Kingcade and John A. Dunlop (1996) prepared a work on "Demographic developments in Eastern Europe and the former Soviet Union, present and future". They stated their goal that "This work will profile trends in fertility, mortality and in migration in the recent past drawing on the Census Bureau's International Data Base. We will explore future developments in population size and age and sex composition through comparative analysis of our recently completed round of world population projections". This paragraph was taken from this work because of its critical way about "the desire of Westernization".

Figure V.2.5. CDR in Albania, Bulgaria, Romania, Russia and Turkey between the periods of 1950-2010



Source: Census Bureau International Data Base and UN World Population Prospects Data Base, 2005

Crude Death Rate (Figure V.2.5.) in Bulgaria (12 per 1000 population), Romania (10.8 per 1000 population) and Russia (11 per 1000 population) has also shown similar trends from the beginning of the transition. However, it is exact that the transition has also different effect on CDR in Albania (5.6 per 1000 population) and such a development should be thought as an another issue which needs to be examined (Census Bureau, 2005).

Infant mortality rate (IMR) has increased solely when the social and economic conditions begin to hinder preventive measures against diseases. Sudden breakdown of socio-economic structure and conventional life styles brings about demolition of all social-functional values severally like dominos following each other; consequently, the social system gets weak. Health system is a part of social system and its deterioration causes lack of care, rapid impoverishment (especially impoverishment of working class) and increase in annual number of deaths. Communist countries have shared same predestination and the new situation can be

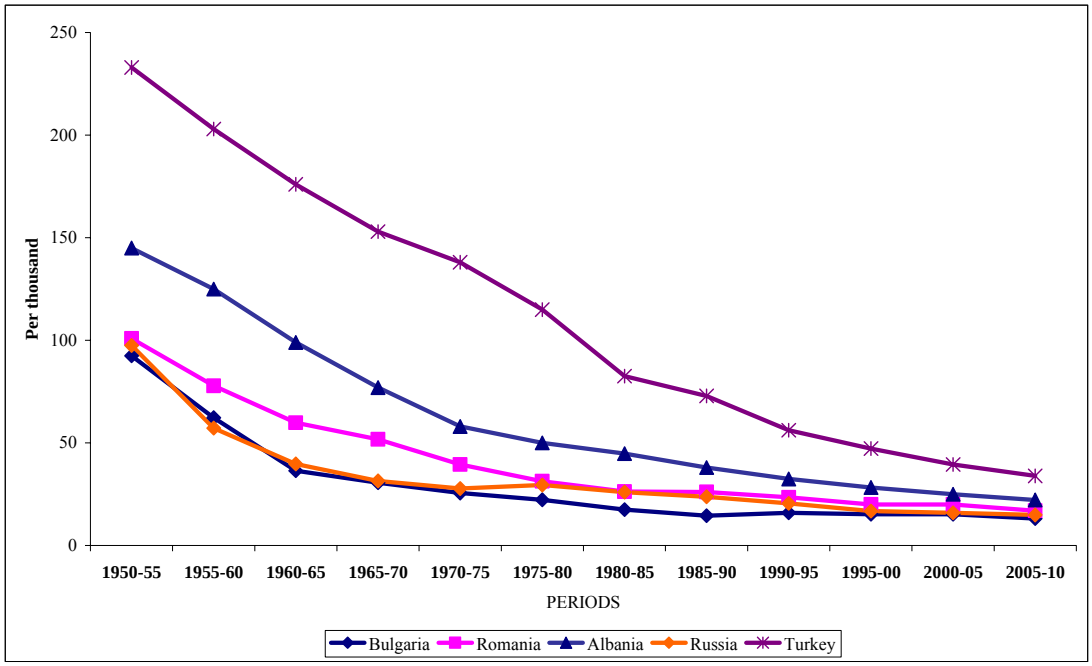
named as "*neo poverty of Communist countries*" and it has strong negative effect on IMRs.

Loss of quality in health services and poverty brought about a slight rise in IMR (around 16 per 1000 births in 1990s) in Bulgaria which had the lowest IMR (it declined by 14 per 1000 births in the period between 1985 and 1990) for the most terms before transition. Romania has a bit higher IMR (24 per 1000 births) than Russia after the transition but generally Romania's IMRs are higher than those of Russia's and Bulgaria's. Albania's IMR has followed a similar trend with the other post transition countries (Figure V.2.6), however, it has the highest values among them. With respect to Turkey, there is only one thing to say: The "*puzzle*"[18] is still worth to be examined. Decline in Turkey's IMR seems more definite after 1990s.

The mortality pattern is in the form of elderly death in all countries which are told here except Turkey.

[18] In her famous study named "Infant mortality: A Turkish Puzzle?", Gürsoy-Tezcan describes high values of infant mortality rate in Turkey as a "puzzle" and develope arguments on the childhood issues primarily in relation to mothers rather than within the dynamics of a broader cultural context: "*In the Istanbul sample most of the factors related to high child mortality are household and cultural conditions encircling the mother, and that only a few of the factors are direct attributes of the mother herself" (Gürsoy-Tezcan, 1992)*.

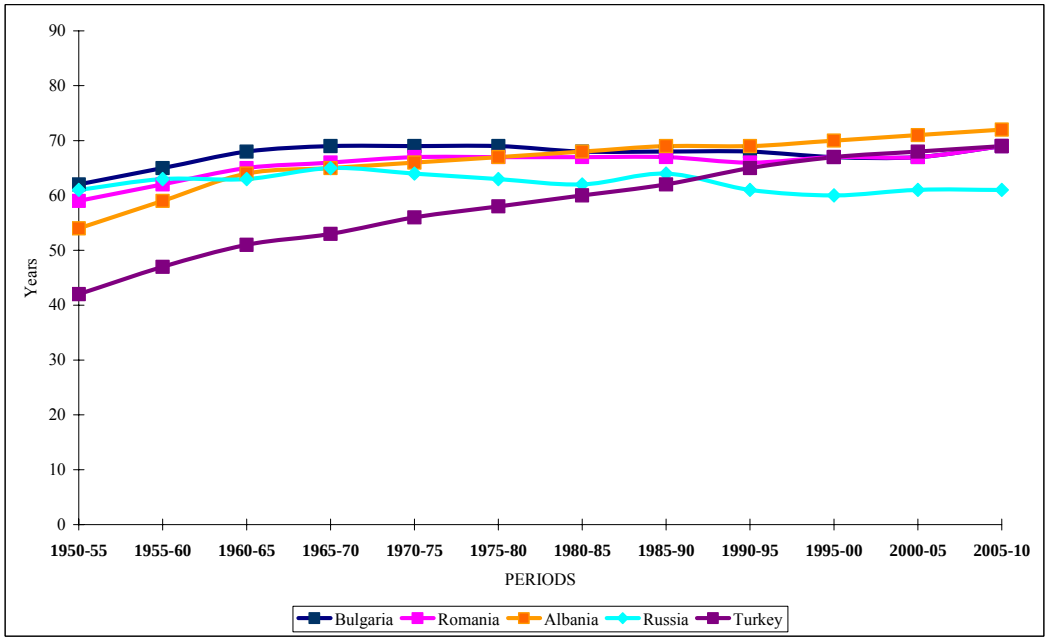
Figure V.2.6. IMR in Bulgaria, Albania, Romania, Russia and Turkey between the periods of 1950-1955 and 2000-2010



Source: Census Bureau International Data Base and UN World Population Prospects Data Base, 2005

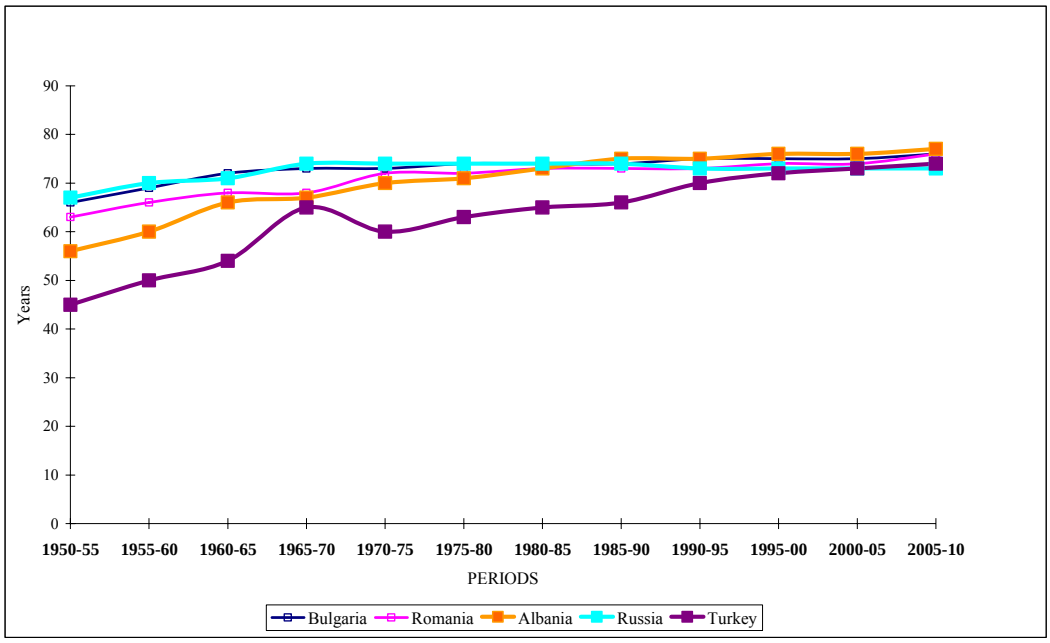
Falling longevity is also one of the direct outcomes of East Europe's continuing social and economic problems. Stagnant living standards, low real income, high poverty rates, unemployment, growing social inequality, environmental pollution and the health care crisis that has resulted in untreated disease and early death especially among the elderly and poor are the sufficient causes of falling longevity. Figure V.2.7 and Figure V.2.8 refer to life expectancy at birth (e_0) which is defined as average number of additional years of a person would live if the mortality conditions implied by a particular life table applied. $e_{0\text{-male}}$ was dramatically low during 1950s in the all countries however; the most resolute increase has been realized in Albania and Turkey from 1950s to 2000s. In Bulgaria and Romania $e_{0\text{-male}}$ has a slight decrease but for Russia a dramatic decrease is clear because in mid-1950s $e_{0\text{-male}}$ was about 64 in this country, it fell to under 60 years in the period of 1990-2000. In Bulgaria during the transition (1989), $e_{0\text{-male}}$ was about 68; in 1995-2000 it was about 67 years.

Figure V.2.7. Life expectancy at birth (male) in Albania, Bulgaria, Romania, Russia and Turkey, 1950-2010 periods



Source: Census Bureau International Data Base and UN World Population Prospects Data Base, 2005

Figure V.2.8. Life expectancy at birth (female) in Albania, Bulgaria, Romania, Russia and Turkey, 1950-2010 periods



Source: Census Bureau International Data Base and UN World Population Prospects Data Base,2005

Life expectancy at birth for females ($e_{0\text{-female}}$) does not show dramatic declines for all countries. Both it has not changed so much for all periods and it is much higher than $e_{0\text{-male}}$. Turkey's $e_{0\ -\ \text{female}}$ is the lowest value from 1950s (45) to 1980s (65) but this value has been continuing to increase.

According to basic demographic indicators given for four post-transition countries, Bulgaria is a typical post-transition country but it should be indicated that it can be seen as a country on the first line which has experienced the most dramatic descents and ascents during and after the transition.

Philipov (2002) describes six processes for post-transition countries:

a. Educational enrolment: rise in need of new professions and occupations and number of private schools and universities.

b. Social stratification: The differences between the social groups become clear after the transition period.

c. Income inequality: Break-down of the regular fiscal policy of the governments brings about rise in income inequality.

d. Rise in impoverishment

e. Unemployment: Unemployment did not exist during the communist regime. But during the 10 year period unemployment rate rises considerably (8-9 times).

f. Declining effectiveness of family and other policies: Maternity and childcare leaves, compensation for income during maternity leave, child allowances are some of applications of family policies at the start of transition in post- transition countries. During the transition all payments decreased, in most of countries, due to high inflation. (Philipov, 2002).

These are same social aspects of transition determining decisions of couples on founding a family. However, increase in number of extra-marital births in post-transition countries shows that there is a real change in comprehension of

parenthood: Extra-marital fertility is contributed to extra-marital unions. In Poland percentage of extra-marital unions was 6 percent in 1990 and it reached by 12 percent in 1998. In Romania, while it was 17 percent in 1993, it reached by 24 percent in 1999. In Bulgaria it was 12 percent in 1990 and in 1999 it was calculated 35 percent. (Philipov, 2002; Sobotka, 2003). Results of national surveys [internationally well-known surveys such as World Fertility Survey (WFS), Fertility and Family Survey (FFS), Demographic and Health Survey (DHS) and the like] and individual scientific works of these countries also show that there is a sharp increase in the share of births in non-marital partnerships but after the transition, that "marriage" and classical "family" structure which is the less Western left its place to "extra marital childbearing" and "extra-family".

CHAPTER VI. BACKGROUND CHARACTERISTICS OF THE BULGARIAN POPULATION: ECONOMIC, SOCIAL AND DEMOGRAPHIC DEVELOPMENTS

VI.1. SOCIAL AND ECONOMIC PROFILE

VI. 1. a. Location

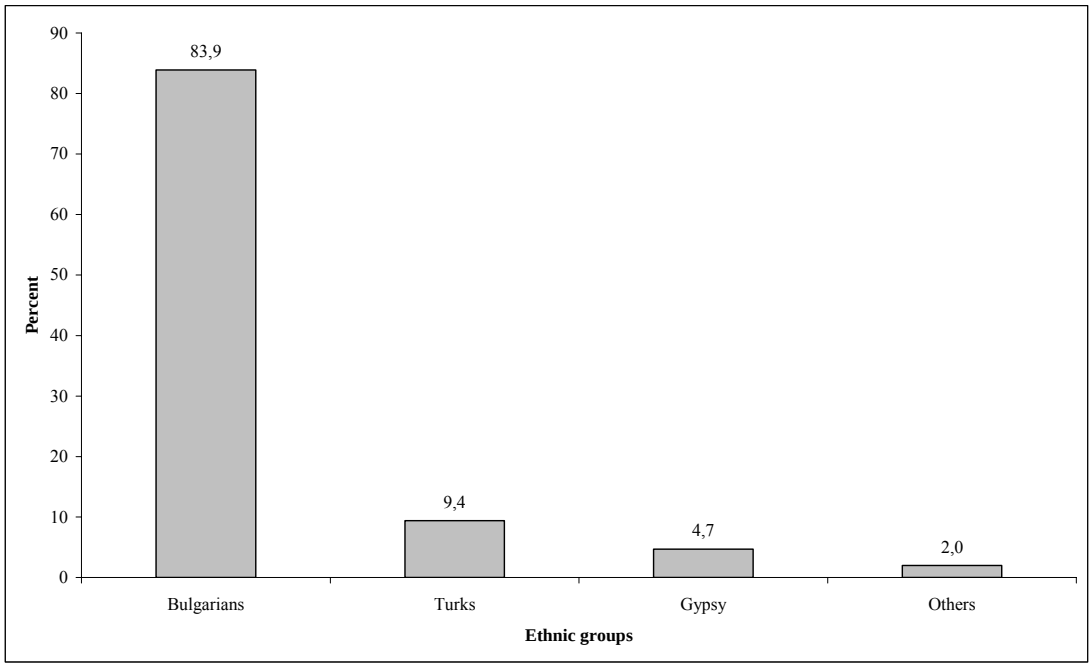
Map VI. 1. Republic of Bulgaria

Bulgaria situated in the Eastern Balkans shares borders with Romania, Turkey, Greece, the Federal Republic of Yugoslavia, and Macedonia.

VI. 1. b. Ethnicity

There were about 86 percent Bulgarians in the country in 1956. They reached by 90.9 in 1975. But in 1992 number of Bulgarians was about 86 again. In 1956, about 9 percent Turks and about 3 percent Gypsies were living in this country. During 1970s number of both Turks and Gypsies fell to 8.4 and 0.2 respectively. However, at the beginning of transition, percentage of Turks reached to its previous level and percentage of Gypsies had increased in time and rose to 4 percent in 1992 (NSI, 1995, 2001).

Figure VI.1.b.1. Percentage distribution of the ethnic groups in post-transition Bulgaria, 2001

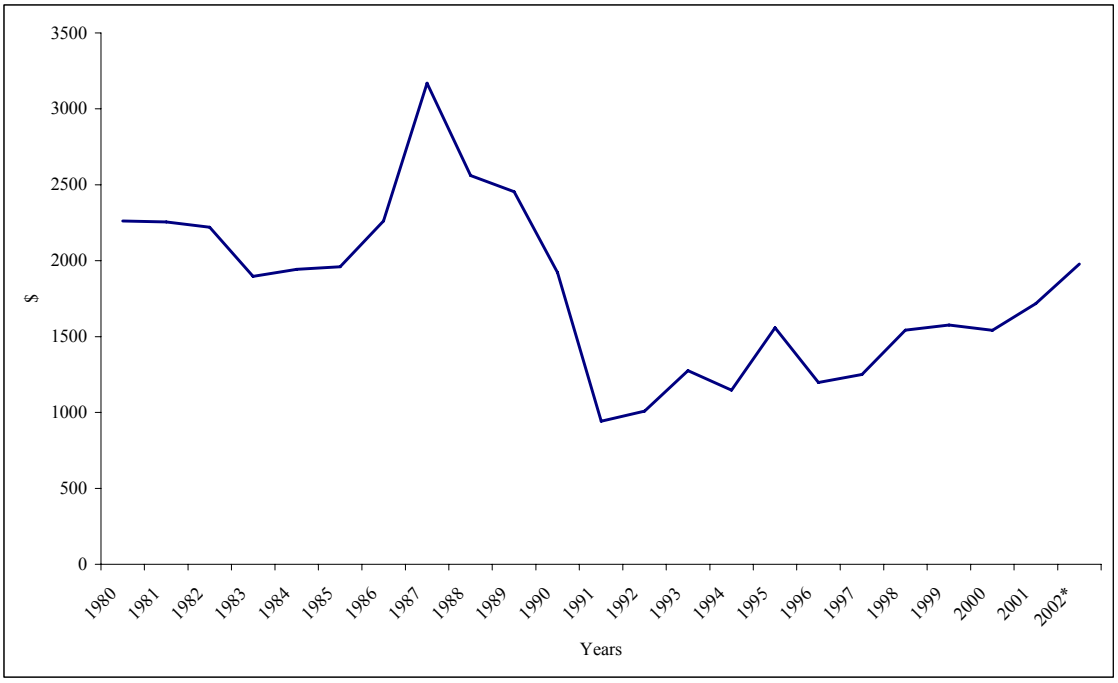


Source: NSI, 2001

According to Census 2001 (Figure VI.1.b.1), the population ethnically Bulgarian: about 84 percent of the population is Bulgarian. 9.4 percent are Turks and 4.7 percent are Gypsy. On the other hand, there are also Macedonian, Armenian, Tatar, Gagauz, and Caucasian (totally 2 percent) (NSI, 2002).

VI. 1. c. Economic Profile of Bulgaria before and after the transition

Figure VI.1.c.1. Gross-Domestic Product in Bulgaria, 1980- 2002[19]



Like its neighbors in Balkans, Bulgaria had a communist structure about five decades: From the middle of 1940s to 1989. Until 1989, Bulgaria had a Soviet style economy and all agricultural and industrial enterprises were state-controlled. Bulgaria lived under the communist rule for more than four decades and, it experienced a long period of social and economic unrest. In 1990s, the market-oriented reform was realized. Although Bulgaria was a traditionally agricultural country, it had begun to industrialize since the Second World War and industrialization process stood in the forefront until the end of 1980s.

New opportunities for economic development were born after 1989: Free-market principles were acknowledged; private enterprise, foreign investment and a competitive production structure have become possible. Yet ideal of economic development turns into economic uncertainty unexpectedly. Putting Bulgarian

[19] Preliminary data.

economy's affairs in order again most probably would take a long time. Now, it will be so beneficial to describe preparatory elements of these affairs.

Change in Gross Domestic Product (GDP) is a crucial indicator measuring economic performance of a country. Therefore, at first, economic adventure of Bulgaria will be presented by examining the Bulgaria's GDP line relating to period of 1980-2000s (Figure VI.1.c.1). Between 1980 and 1987 expansions and contractions in GDP were showing an economic performance trying to raise prosperity level of the country. Actually a rapid rise had been experienced between 1982 and 1987 and reaching the top in the period of 1987-1988. A fantastic transition period started with a decline from this top point while Bulgarian government and people were expecting that an official transition to free market and liberalization would take the country to a higher prosperity phase. Finally, the country experienced a transition which was not as easy as everybody had considered.

United Nations Report (2000b) describes fourth economic period of Bulgarian economic performance:

a. The first between 1989 and 1993: Introduction of economic reforms such as the liberalization of prices, trade and foreign exchange, urban property restitution and the initiation of privatization. GDP declined and inflation increased.

b. The second period between 1994 and 1995: GDP grew on average by 2 percent while inflation and fiscal deficit showed declining tendency with contribution of growing private sector and improvement performance of State enterprises.

c. The third period between 1996 and 1997: the macroeconomic situation deteriorated again such as structural problems in banking and public enterprise sector, delays in privatization process, increase in budget deficit and delays in payments.

d. The fourth period from mid 1997 to the present day: New government and restoration of economic stability; Currency Board Arrangement (CBA), negotiations with International Monetary Fund (IMF) on Extended Fund Facility (EFF: a three-year program) (UNDP, Bulgaria, 2000b). Finally, inflation was reduced from over 500 percent at the end of 1997 and GDP grew about 4 percent.

Table VI.1.c.1. GDP and Other Key Economic Indicators, Bulgaria, 1995-2000

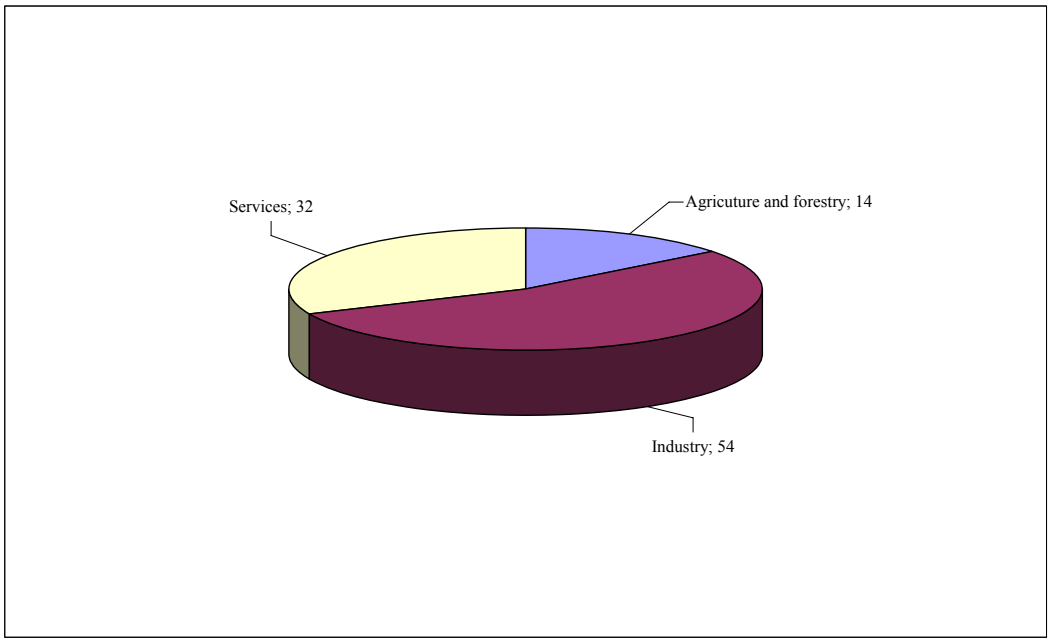
	1995	1996	1997	1998	1999	2000*
GDP Growth (%)	2.9	-10.1	-7.0	3.5	2.4	4
Inflation (%)	34	310	579	1	6	4
Nominal Exchange Rate (Leva/US$)	71	487	1776	1675	1947	2a
Unemployment rate (%)	11	12.5	14	12	16	19b
Montly Wages (US$)	130	56	108	128	122	122c
Total Revenues (% of GDP)	36	32	33	40	43	37
Total Expenditures (% of GDP)	41	42	36	38	44	38
Fiscal Balance (% of GDP)	-5,6	-10.4	-3	1	-1	1

*Projections from IMF, Bulgaria Staff Report for the 1999 Article IV Consultation and Third Review
a Average estimate for the year in new leva
b As of June 2000
c June-2000, public sector

Source: UNPA, 2000b

Table VI.1.c.1 rests on the international works of United Nations (2000) it uses World Bank's records (1999, 2006). In order to take precautions against increase in unemployment rate the government was trying every method; but it reached by 20 percent in 2000s. Total revenues increasing gradually between 1995 and 1999 fell to 37 (percent of GDP) in 2000. The economy has begun to grow from 1999 to date though a lower GDP than previous year. Distribution of 1980 GDP by sectors is another approach which helps to measure economic performance. Therefore Figure VI.1.c.2, Figure VI.1.c.3 and Figure VI.1.c.4, were prepared by collecting documents and information from the recent UN reports and statistics and census of various years supplied by National Statistical Institute in Sofia.

Figure VI.1.c.2 GDP by production approach Bulgaria, 1980 (percent)

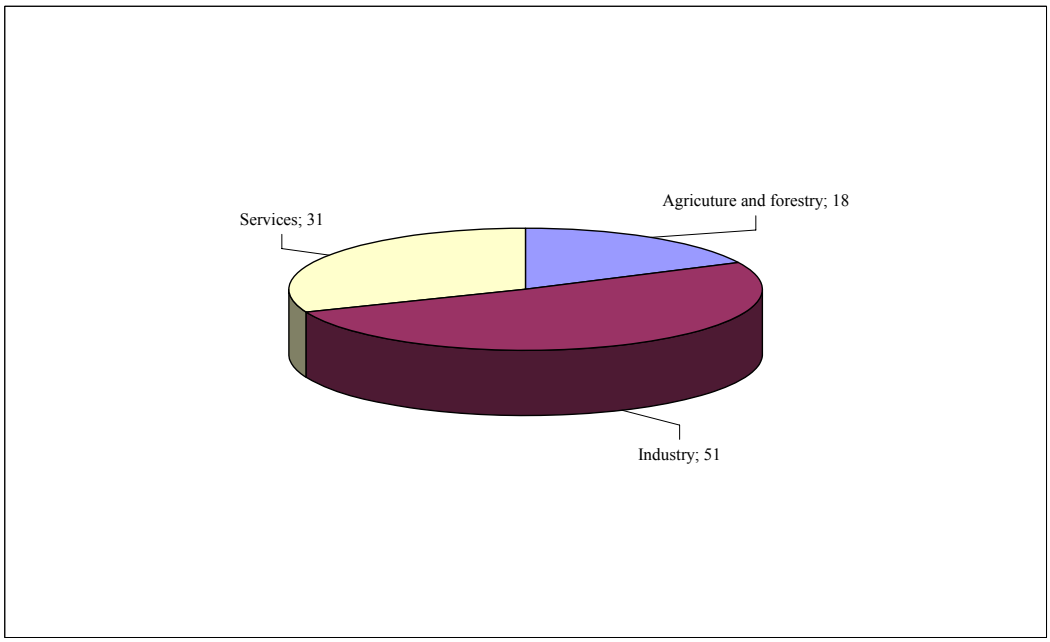


Source: NSI, 2002

Groups of economic sectors were listed and defined by National Classification of Economic Activities (NCEA): Group of "Agriculture and forestry" covers agriculture, hunting, forestry and fishing; "Services" includes trade and repair; hotels and restaurants; transport and communications; financial intermediation; estate and business activities; public administration, compulsory social security; education; health and social work; other activities; "Industry" covers mining, quarrying manufacturing, electricity, gas and water supply, construction (NSI, 2002).

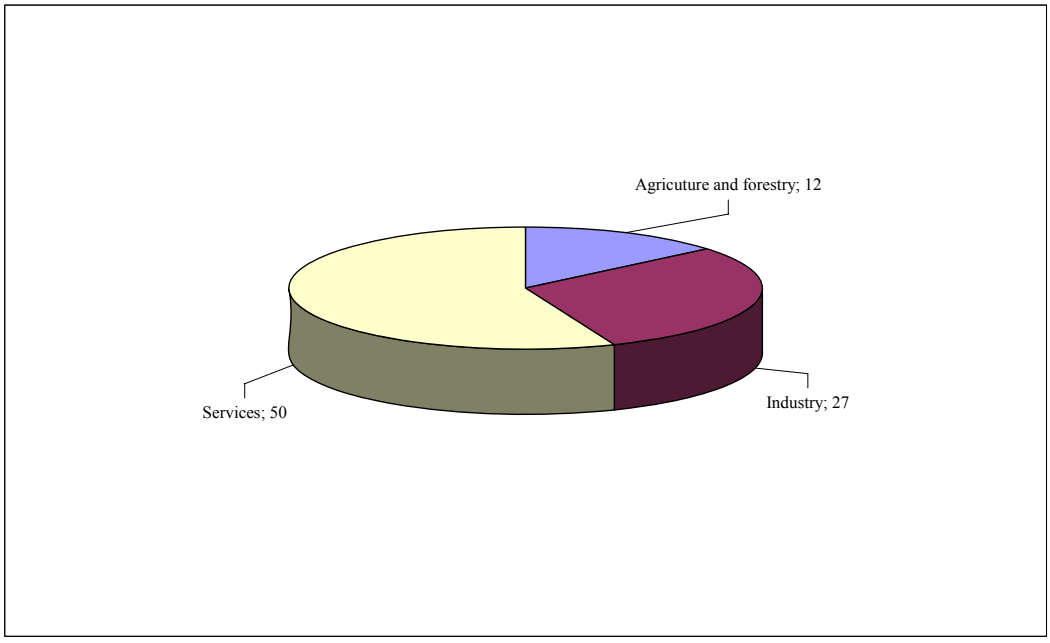
In 1980 about 54 percent of production was provided by industrial activities and about 32 percent was by services. These values announce that Bulgarian economy had lost its agricultural characteristics and had entered into an industrial age a long time ago.

Figure VI.1.c.3. GDP by production approach, Bulgaria, 1990 (percent)



Source: NSI, 2002

Figure VI.1.c.4. GDP by production approach, Bulgaria, 2000 (percent)



Source: NSI, 2002

As regards the division of employment by the sectors, percentage of employed people in agricultural areas is quite higher than people employed in other sectors. For example, as to data of census years between 1990 and 1994 census data, the share of the employed in the private sector of economy by branch, percentage of industry is only about 1 percent but of agriculture is about 4 percent, in 1994 percentage of industry is 4 but of agriculture is 18 (NSI, 2001, 2002). Improvement in services was very fast especially in the last decade: While it was 31 percent in 1990, it was found about 50 percent in 2000. Thus, proportion of agriculture and forestry had become smaller. In 2002, share of public sector in total economy was 23 percent; proportion of private sector was 73 percent and when the percentage distribution of the sectors for each category was overviewed carefully, it could be easily seen that services reached about 20 percent for public sector and about 40 percent for private sector. At present Bulgarian economy has still experienced the highest level of services. According to the recent census results, today its share in total economy equals to 59 percent.

The income level in Bulgaria is so low that the "Report of Millennium Development Goals" points at extreme poverty and malnutrition after the transition. It implies that the first target of the government should be "threefold increase of average incomes" because Bulgarian average incomes approximately ten times lower than European Union (EU) average income and twice as low as EU accession countries (UNDP, 2003). Also income inequality in Bulgaria is still lower than that in EU and even lower than in the countries such as Hungary, Slovenia, Poland and Russia. This data, however, does not account for the high level of unregistered incomes (UNDP, 2003).

According to National Statistical Institute in Sofia (1999), it is unnecessary to become too pessimistic:

> *"In Bulgaria the share of the gray economy in GDP is between 20 percent and 35 percent. According to the Bulgaria Ministry of Labor and Social Policy two thirds of the employed receive social security on the*

minimum wage. The gray economy, however, cannot justify the gap between income levels in Bulgaria and in the EU accession countries."[20]

On the other hand, in 1998, National Human Development Report of United Nations Development Program used a more dramatic headline: "*The society in transition: coping with survival*" because beginning of the transition was marked by a drastic drop in living standards and prospects. In addition, extremely unpredictable economic environment was at the door. It also mentioned that wages and salaries, which comprised 52 percent and pensions which accounted for about 22 percent of all income, were the main source of cash income in a Bulgarian household in 1996. Income derived from property (1 percent) and from entrepreneurship (6 percent in 1996), which were the only sources of income which had not suffer an erosion in real terms, continued to account for a small part of total income which would not change the overall negative tendency (UNDP, 1998)

Wage and pensions also have been affected by high inflation in recent years. Average monthly wage in 1996 was 42 percent of its 1990 level. The average monthly pension fell by 65 percent over the 1990-1996 period. In 1997, it did not change, its equivalent in dollars was just 10$ (UNDP, 1998). From 1997 to 2000s changes in wage and salaries have never been satisfactory. According to statistics of 2001 their total proportion in total income is just 38 percent (NSI, 2002a, 2002b).

In addition to solution of income problem, the "decrease of unemployment by one-third" (Figure VI.1.c.5) had been given as the second target of Bulgarian government in coverage of reaching Millennium Development Goals because Bulgarian unemployment was twice as high as that of the EU (UNDP, 2003) At the end of 2000, unemployment indicators in the districts of Pazardjik, Montana, Sliven, Vidin, Targoviste, Yambol, Smolian, Razgrad, Shumen and Slistra were over 8 percent higher than the national average (17 percent). These ten districts are at the bottom of the GDP ranking (UNDP, 2002)

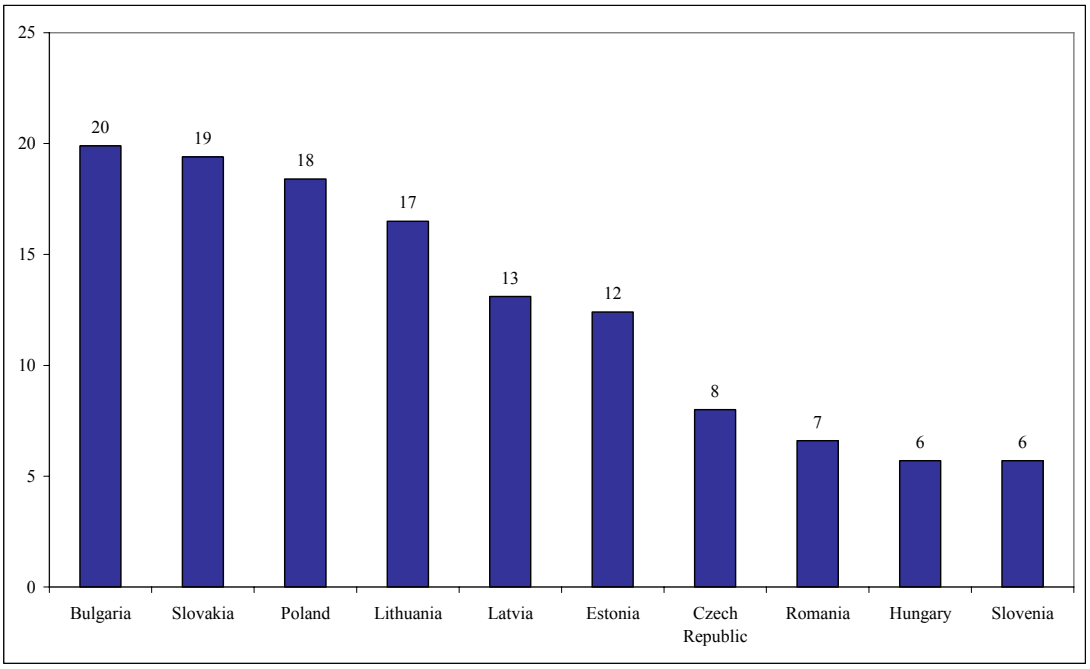
[20] A paragraph from the special works prepared by NSI researchers and Ministry of Labor and Social Policy.

Table VI.1.c.2. Unemployment in Bulgaria, January 1997- January 1998

Registered:	January 97	January 98
Unemployed women	278 413	292 069
Unemployed under the age of 29	196 731	193 650
Unemployed longer than 1 year	118 866	165 104
Total number	512 992	543 751

Source: UNDP, 2003 (a) and 2003(b).

Figure VI.1.c. 5. Unemployment Rates in EU accession countries, 2001 (percent)



Source: Ministry of Labor and Social Policy Data presented by UNDP, HDI, 2003 (b)

Real growth of economy was strongly negative from 1989 to 1993. In 1993 and 1995 it had slightly positive growth trend. The inflation rate was slowed from 133 percent in 1994 to 33 percent in 1995. (UNDP, 2000b; NSI, 2002). There were 512 992 unemployed persons in 1997 but this figure rise to 543 751 in a year (Table VI.1.c.2). Bulgaria has the highest unemployment rates in EU accession countries. Figure VI.1.c.5 also shows that Bulgaria: about 20 percent, Poland: about 18 percent, Romania: 7 percent, Slovakia 19 percent, Lithuania: about 17 percent in 2001. However, in the last two years total unemployment levels decreased to about 18 (UNDP, 2003a). So, Bulgarian government has still targets in terms of obtaining level of welfare in EU accession countries.

VI. 1. d. Education

The transition from the state controlled economy and its society which has strictly ruled, to a pluralistic, democratic society and market economy was realized in 1989. Aim of the transition is defined as "a welfare society" which refers to solve the problems of social and ethnic groups and keep their rights and interest. But a painful crisis was at the door that has negative effect both on the future plans and young generation.

However, the Bulgarian government considers Bulgarian children's future and knows that education system has to provide them with skills in order to be competitive. Because a common home shared with the other European countries waits for them in a "planned" future. Education in Bulgaria is always crucial and it has long traditions and has never given up the ideal of raising good European citizens.

Table VI.1.d.1. Primary enrollment ratio (Gross), Bulgaria, 1990-2001 (Percent)

Year	1990	1998	1999	2000	2001
Primary enrollment ratio (Gross)	86,1	95,6	94,0	92,7	90,4

Source: UNDP, 2000(b)

However, as seen in the Box VI.1.d.1, even primary enrollment ratio has gradually decreased in the post-transition period. The number of primary schools in the beginning of 2000s is 2843. In comparison to the 1996 this number decreases with 407. According to Dimitrova (2002), the statistics belonging to 1996 year, the number of children going to school declines by about 8 percent. So, at that point, it is beneficial to check out the ongoing problems of the Bulgarian education system:

a. It is not flexible enough and can not be adapted to the new conditions isolated from the common social and economic processes and for now, naturally, it is not amongst the priorities of the society;

b. The government cannot support financially enough (Box VI.1.d.2) however; the necessary equipment has to be adapted according to the European standards. In Box. VI.1.d. 2., the indicator reflects the priority afforded to the education sector by the government is gradually decreased between 1990 and 1995 ;

Table VI.1.d.2. Central government expenditures on education, Bulgaria, 1980-1995 (% of GDP)

Year	1980	1985	1990	1995
Central government expenditures on education	4,5	5,5	5,6	3,9

Source: UNDP, 2000(b)

c. It is still much too centralized; there is a problem with exchange of the ideas and accretion of the new teaching methods;

d. It still helps to develop information and knowledge, but does not help to learn how to cope with the challenges and the requirements of a democratic society;

e. It needs a new “state education policy”;

f. It has not the opportunities of equal education for young people;

g. It needs motivation to develop a more contemporary education;

h. Especially in secondary education;

i. There is a historically structured conservatism which prevents educational reforms;

j. The implementation of the changes is often chaotic and “inadaptability” towards the changing social conditions, moreover, there is not enough social and governmental assistance;

k. Expected education standard is still not developed;

l. Education activities are not connected to society to the changing civil environment;

m. Effects of 1ower-centralization are still continuing, especially on the education authorities and teachers;

n. On the other hand materials and teaching methods of “decentralization” still create problems;

o. New education technologies are not implemented;

p. Dropping-out from school show increased values several times (Center for the Study of Balkan Societies and Cultures, 1999)

The changing demographic structure (birth-rate decrease, negative natural growth of the population, dramatic changes in the number and the structure of the child population, etc.) has been slowly getting rid of the base of the educational pyramid. The one-way impact of the changes, objectively determined by the uniformity of the interests of society, the educational system, and the family, is still not being achieved. The family is disorganized in its educational functions; an effective control upon the children has not been realized (Center for the Study of Balkan Societies and Cultures, 1999)

Bulgarian society had always high educational values and in spite of the difficulties of transition. Bulgarian education has two traditional characteristics which can be a good model for the other countries: The first is that the gender inequality is never an issue; girls and boys have same rights: They are educated by benefiting from the same sources and under the same conditions; the second is that education is still a tradition in this country and, Bulgarian people at several ages go to the library very often as a part of this tradition.

The second millennium development goal (UNDP, 2003) is to improve primary and secondary education.

"The targets set are aimed mostly at achieving school education up to age 16…The progress in the educational targets will be monitored by keeping track of the enrollment rate and the completion and drop out rates, disaggregated by the initial stage of primary education, junior high stage of primary education and secondary education… These targets would be difficult to achieve without the full integration of the vulnerable social groups into the educational system of Bulgaria. (UNDP, 2003)"

At present, Bulgarian government tries to carry out some targets to create an educational reform. There of them are that restructuring a school network in the country; maintaining financial stability of municipal budgets with respect to educational activities and, solving problems of the ethnical groups by opening new schools and appointed talented teachers for them (UNDP, 2003).

VI. 1. e. Religious groups after the transition

Eastern Orthodoxy

In 1991 most Bulgarians were the members of the Bulgarian Orthodox Church, it was an independent national church like the Russian Orthodox Church and the other national branches of Eastern Orthodoxy. Because of its cultural value and national character it has a different status from the other churches in Bulgaria. It has always kept as a representative of Bulgarian national consciousness. The ritual of Baptism was so powerful that its power caused the communist state to introduce a naming ritual called "civil baptism".

Islam

Like all the religious practitioners, Muslims in Bulgaria began to take pleasure in greater religious freedom after the fall of communist regime. New mosques were built in many cities and villages; sometimes a church and a mosque has been side by side.

Roman Catholicism

In 1991 about 44,000 Roman Catholics remained in Bulgaria, mostly in Ruse, Sofia, and Plovdiv (Filibe). Another 18,000 Catholics were concentrated in Sofia. Bulgaria reestablished relations with the Vatican in 1990.

Protestantism

The communist regimes subjected Protestants to even greater persecution than the Catholics. However, Protestantism finds the opportunity of defending its freedom and principles after the communist regime. The Adventist Church had 3,500 Bulgarian members, two thirds of them young people in 1991.

Judaism

In 1990 the Jewish population was estimated at about 71 thousand. At that time, only two rabbis were active, although several synagogues were reopened under the new regime.

VI. 2. DEMOGRAPHIC PROFILE

VI. 2. a. Basic indicators

"It is clear that Bulgaria's population crisis is a direct result of economic distress…Unforeseen and unwelcome changes have led to a demographic shock (Vassilev, 2005)"

This part accounts for demographic presence of Bulgaria with the purpose of understanding the country's challenge with demographic crisis which has economically and socially determined the living arrangements. Such an approach shall entitle us to distinguish and describe demographic developments before and after the transition.

Table VI.2.a.1. Bulgarian population by the census years; 1887-2001

Census years	Total	Male	Female
31.12.1887	3 154 375	1 605 389	1 548 986
31.12.1892	3 310 713	1 690 626	1 620 087
31.12.1900	3 744 283	1 909 567	1 834 716
31.12.1905	4 035 575	2 057 092	1 978 483
31.12.1910	4 337 513	2 206 685	2 130 828
31.12.1920	4 846 971	2 420 784	2 426 187
31.12.1926	5 528 741	2 743 025	2 785 716
31.12.1934	6 077 939	3 053 893	3 024 046
31.12.1946	7 029 349	3 516 774	3 512 575
01.12.1956	7 613 709	3 799 356	3 814 353
01.12.1965	8 227 866	4 114 167	4 113 699
01.12.1975	8 727 771	4 357 820	4 369 951
04.12.1985	*8 948 649*	*4 433 302*	*4 515 347*
04.12.1992	*8 487 317*	*4 170 622*	*4 316 695*
01.03.2001	*7 928 901*	*3 862 465*	*4 066 436*

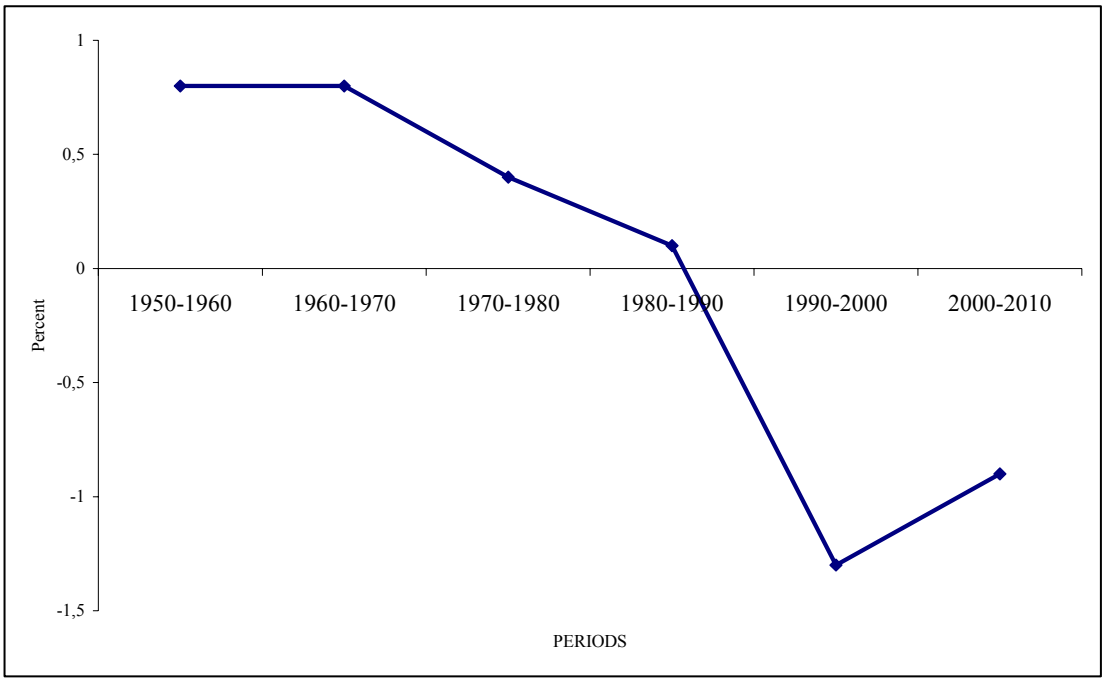
Source: NSI, 1990

Table VI.2.a.1 shows population in Bulgaria by census years. The first census was carried out in 1887. However, dates of census have not regular time-intervals.

The last census was carried out in March, 2001 and there are eight years between this census and the previous one.

In 1985 population of Bulgaria had been counted 8.948.649, however, in 1992 it fell about 462.000 and, during the next census in 2001, there was about 559.000 missing more. The transition period which brought newly embraced democratic values into viable civic practices has affected social attitudes and behaviors exceedingly and forced people to immigrate or to bear irony of fate.

Figure VI.2.a.1. Population Growth Rate in Bulgaria, 1950-2010



Source: NSI, 2003

Population growth rate (Figure VI.2.a.1) started to fall in the end of 1960s and it continued to fall to minus 1,5. In the middle of 1990s it has risen slowly but the estimated annual growth rate is about minus 0.9 between 2000 and 2010, one of the lowest levels among the EU accession countries. According to UNDP (2005), the annual population growth rate for 2000–2005 is minus 0.85 percent, with the projected population for the year 2015 at 7,167,000. The population density in 2002 was 71 per square km (183 per square mile).

Table VI.2.a.2. Percentage distribution of the urban and rural populations by sex and the census years, Bulgaria, 1946-2001

Years	Urban	Rural	Total
1946	24,7	75,3	100
1956	33,6	66,4	100
1965	46,5	53,5	100
1975	58,0	42,0	100
1985	64,8	35,2	100
1992	67,2	32,8	100
2001	69,0	31,0	100
	Urban		
	Male	**Female**	**Total**
1946	51,2	48,8	100
1956	49,9	50,1	100
1965	50,0	50,0	100
1975	49,7	50,3	100
1985	49,4	50,6	100
1992	48,9	51,1	100
2001	48,4	51,6	100
	Rural		
	Male	**Female**	**Total**
1946	49,6	50,4	100
1956	49,9	50,1	100
1965	50,0	50,0	100
1975	50,2	49,8	100
1985	49,8	50,2	100
1992	49,5	50,5	100
2001	49,3	50,7	100

Source: NSI, 2001

Bulgaria's agrarian structure was based mainly on small peasant land ownership, which fostered a decline in marital fertility by the end of the 1930s. Until the mid-1940s three quarters of the population lived in villages. The subsequent collectivization of the farms stimulated the creation of an agro-industrial economy and rural-urban migration (Vassilev, 1999). There was a further exodus to the urban centers after 1989 when all residence restrictions were abolished. Large numbers of

people emigrated to neighboring Turkey and Western Europe. Over 350.000 Turks living in Bulgaria for years left following coercive efforts by the communist regime to force assimilation, including the change from Turkish names to Slavic ones. (Vassilev, 2001) In mid-1970s more than half of the Bulgarians was living in urban areas. By 1992, over 67 percent of the population lived in urban centers and towns and 33 percent in smaller rural villages (UNDP, 2003b).

At the beginning of twenty first century 69 percent of Bulgarian people live in urban (Table VI.2.a.2). The proportion of female population living in urban and rural settlements (52 percent and 51 percent respectively) are higher than male population.

The age pyramids; Figure VI.2.a.2, Figure VI.2.a.3, Figure VI.2.a.4 and Figure VI.2.a.5, which are rested on the national census results and UN international data sets, are the signs of speedily declining and aging populations because of gradually increasing mortality and emigration. In 1950s the age structure of Bulgarian society was very similar to a developing country's age structure.

Figure VI.2.a.2 Age pyramid, Bulgaria, 1950 (million)

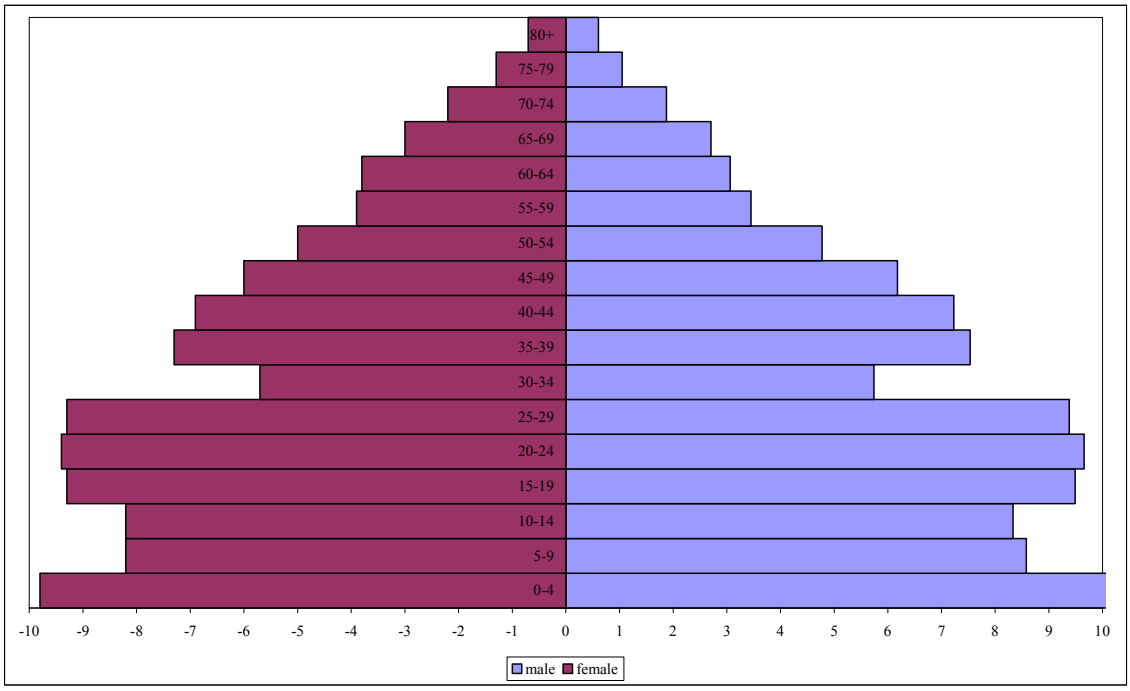


Figure VI.2.a.3. Age pyramid, Bulgaria, 1970 (million)

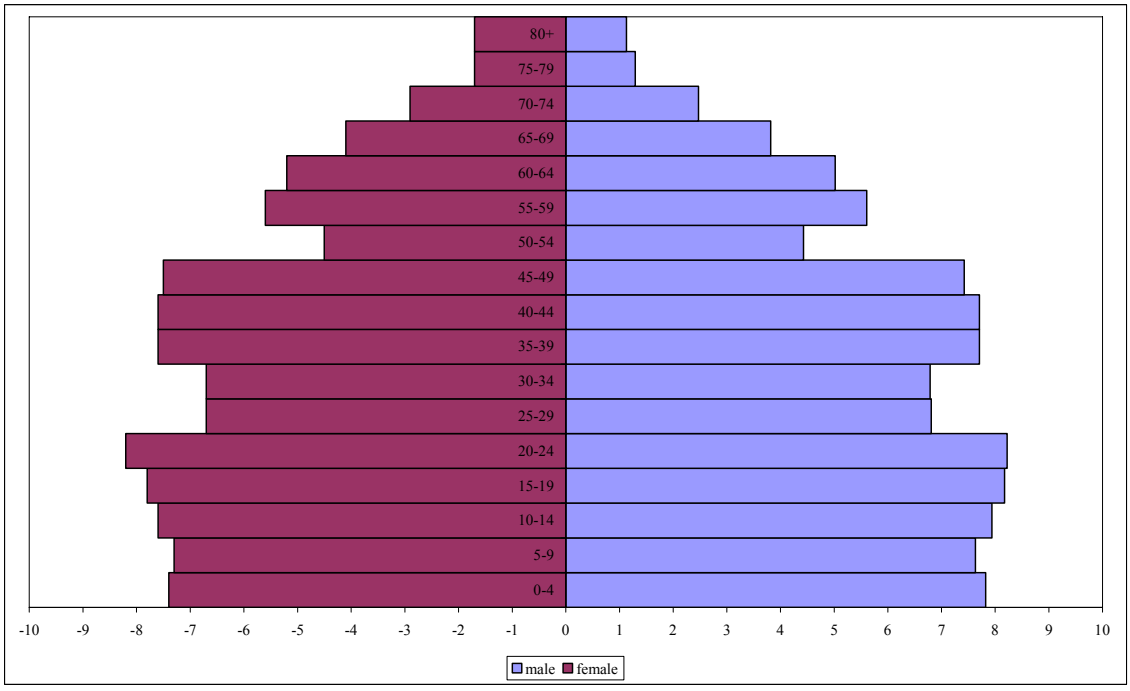


Figure VI.2.a.4. Age pyramid, Bulgaria 1990 (million)

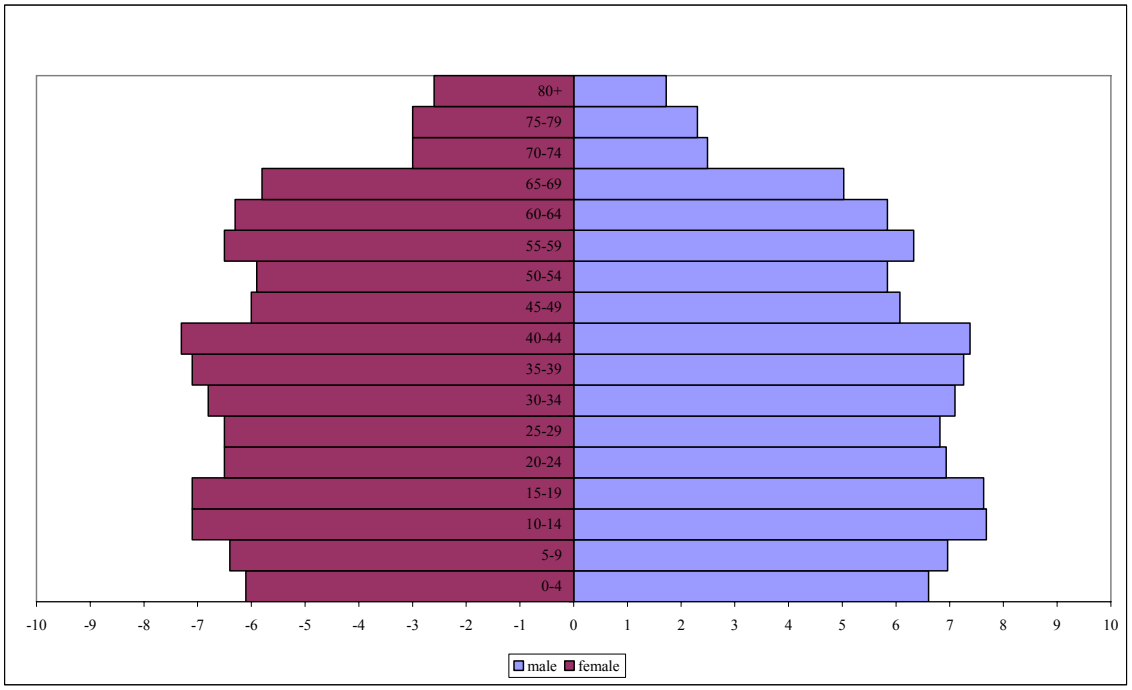
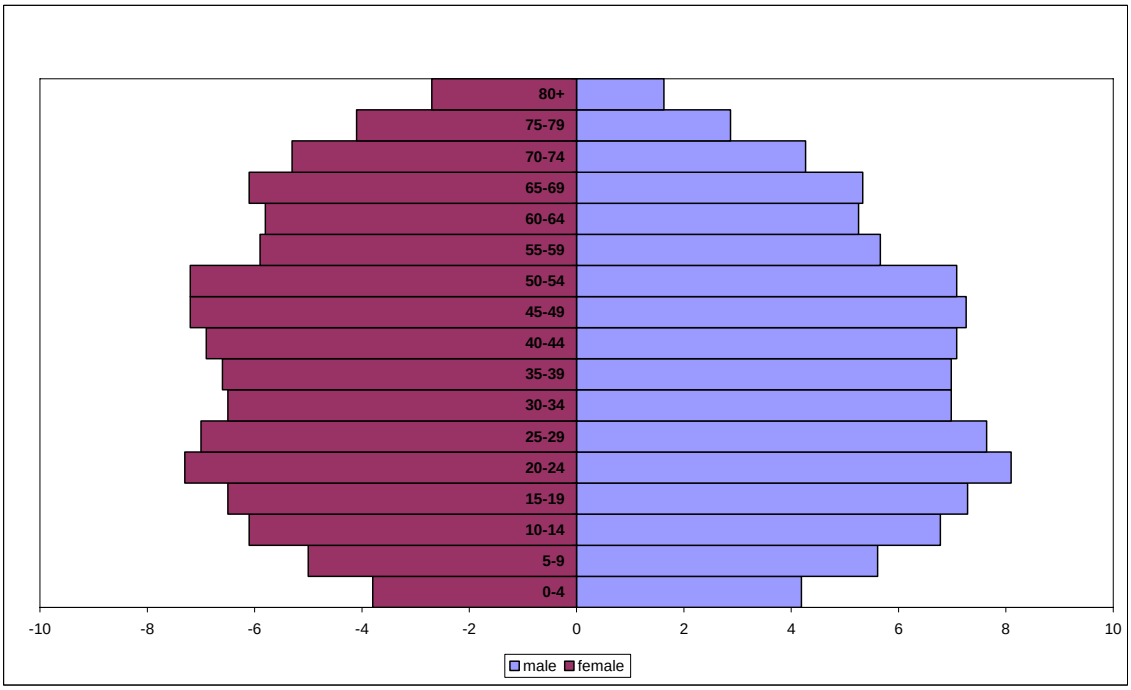


Figure VI.2.a.5. Age pyramid, Bulgaria 2000 (million)



According to the age pyramid of 1950, there is a remarkable decline in 5-9 and 10-14 age groups as a result of the critical effects of the Second World War. When the crude birth rate of 1950 (25.2 per thousand) and the pronatal policies adopted by the communist rule are taken into account; the wideness in 0-4 seems very normal. Similarly, the significant decline in 30-35 age group should be considered as one of the effects of the First World War.

With regard to the age pyramid of Bulgaria of 1970, the cells reflecting the persons between 25 and 34 years old and the persons between 50 and 54 years old are considerably narrow as a continuation of the generations effected from the World Wars. Conversely, base of the pyramid is also narrower than that of the 1950's age pyramid because of fertility decline.

The fertility decline and declining population is more noticeable in the 1990's age pyramid due to its growing body and significantly narrowing base. It should be accepted as a signal of the gradually population. On the other hand, it can be said that this age pyramid reflects a young and active population though it refers to a declining population.

The 2000's age pyramid is surely a symbol of aging population. The dramatically declining fertility and increase in number of the old ages is very obvious.

The age pyramids of the country are undoubtedly affected by the external factors. The external migration in Bulgaria has been always related mainly to the emigration of the population due to the specific peculiarities of socio-economic development. For educational and/or job opportunities abroad almost all the persons in their most active ages have left the country. Emigration of well-educated and well-qualified Bulgarians at early ages means, at the same time, an export of childbirth, erudition and qualification. In addition to emigration, declining fertility, increasing mortality and aging at a quick pace have negatively affect age structure of Bulgarian population.

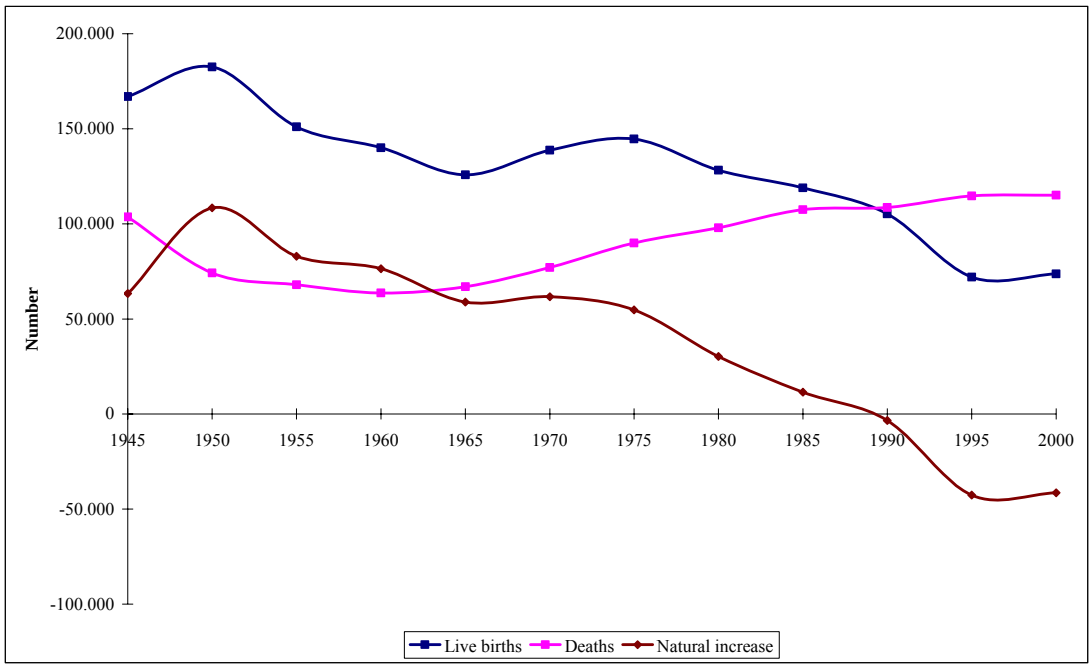
Table VI.2.a.3. TFR in Bulgaria, 1950-2000

Years	TFR
1950	2,9
1955	2,3
1960	2,3
1965	2,1
1970	2,2
1975	2,2
1980	2,1
1985	2,0
1990	1,8
1995	1,2
2000	1,1

Source: Philipov, 2001

Table VI.2.a.3 includes TFRs from 1950 to 2000. While in 1970 TFR was 2.2, in 2000s it is just 1.1, in other words, Bulgaria has still fallen on hard times due to too low fertility, increasing death rates and growing emigration because of hard and stagnant living standards. According to UNDP records; the country's birth rate declined by 35 percent and the death rate increased by 15 percent in the period between 1990 and 1998. Nevertheless, general fertility rate (GFR) decreased by 37 percent. While total fertility rate (TFR) was generally about 2.2 children per women per lifetime until middle of 1980s, now it is the lowest value in the world: 1.9 children per women per lifetime in 2003. The natural growth rate is minus 10.9 per 1000 population (UNDP, 2004).

Figure VI.2.a.6. Number of the live births, deaths and natural increase in Bulgaria, 1945-2000



Source: NSI, 2003(a)

Figure VI.2.a.6 shows the changes in number of live births, deaths and natural increase. Bulgaria as an East European nation has the largest natural growth rate (a negative rate of natural increase means that the death rate is higher than the birth rate). Its population began to fall in size in the late 1980s. Due to its negative natural growth of minus 5.1 per 1000 population, Bulgaria is now undergoing one of the most severe peacetime populations in history (Vassilev, 1999).

> *"With the quantities and tendencies indicated in the birth and death rates, Bulgaria stands in a crucial situation also by the indicator of natural population growth, which in the transition period runs between minus 7-8 and about 6 (in thousand)…The number of exceeds almost twice the number of the live born children. A residential area of about 70-75 thousand inhabitants disappears from the map of Bulgaria everyday. There are no real grounds to expect a break of the negative birth rate tendency in the near future and hence we have to admit the*

fact that Bulgaria will have a negative natural increase during the next 10-20 years."[21]

VI.2.b. Family

Traditionally for all societies family institution is an indispensable part of the life and in general it rests on an official agreement between two persons. It's because, before discussing about the changing family patterns, it is more useful to see the change in marital status. Because as in many European countries, in also Bulgaria although the legal marriages have kept their (traditional) position, the sly increase in the number of the non-marital cohabitations and illegal births have begun to forestall the marriages. On the other hand, number of the divorced or separated women has gradually increased in the country.

[21] This comment was taken from the "Working document (Bulgarian Side)" of 12th meeting of the EU-Bulgaria Joint Consultative Committee on demographic trends and challenges to the demographic policy of Bulgaria. Document drafted by Dr. Konstantin Trentchev, Vice President of the Bulgarian Economic and Social Counsil, President of the "Podkrepa" Confederation of Labour. Brussels, 6th April, 2005.

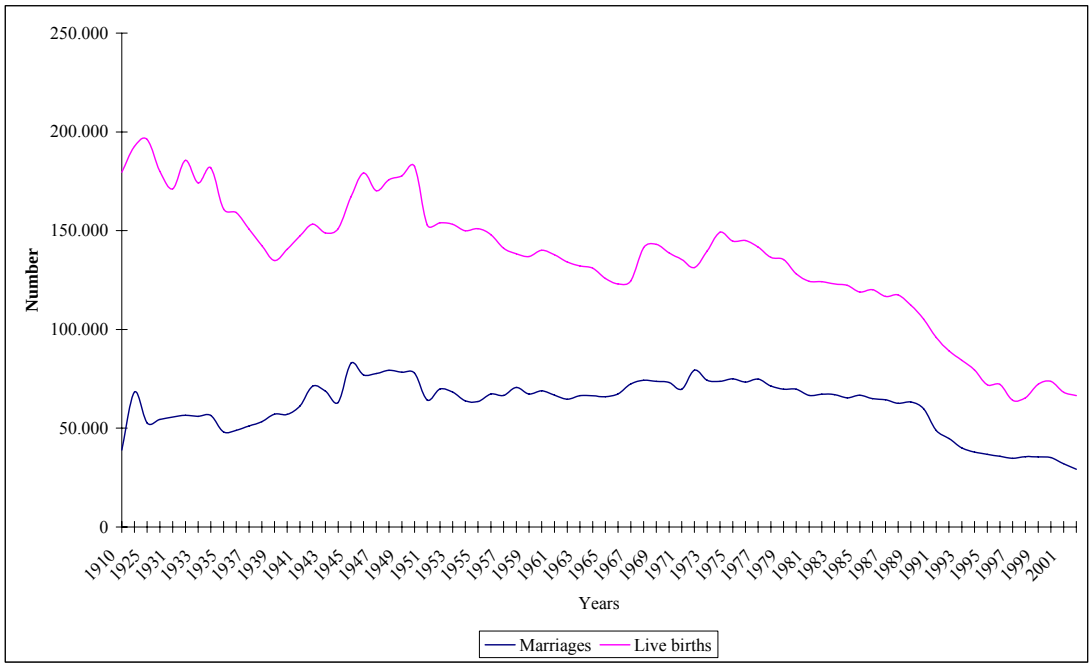
Table VI.2.b.1 Percentage distribution of women by marital status and census years, Bulgaria, 1946-2001

	Census years					
Marital status	1946	1965	1975	1985	1992	2001
Total						
Single	44.1	36.9	34.7	34.0	33.9	33.1
Married	50.1	56.6	57.7	56.3	54.9	53.8
Divorced	0.4	1.0	1.7	2.8	3.0	3.7
Widowed	5.5	5.5	6.0	6.9	8.1	9.1
Total	100	100	100	100	100	100
Male						
Single	47.1	40.0	38.2	37.9	38.2	38.0
Married	49.8	56.7	57.8	56.6	55.7	55.1
Divorced	0.3	0.7	1.1	2.3	2.4	2.9
Widowed	2.7	2.6	2.7	3.2	3.7	3.7
Total	100	100	100	100	100	100
Female						
Single	41.0	33.7	31.3	33.3	29.8	28.5
Married	50.3	56.6	57.6	61.9	54.1	52.5
Divorced	0.4	1.3	2.0	3.6	3.7	4.4
Widowed	8.3	8.4	9.1	1.2	12.4	14.4
Total	100	100	100	100	100	100

Source: NSI, 2001

Table VI.2.b.1 points out the changes in marital status of the people living in Bulgaria by the census years. Even if the percentage of the married people refers to a changeable trend between 1946 and 1975, it exactly increases across the years. During the census in 1946, 50 percent of population was married and number of married males was very approximate to the number of married females. But the number of marriages declined from 74.949 thousand in 1975 to 44.800 in 1992 (NSI, 1995). From 1985 to 1992, total number of the single people did not differentiate significantly; however, number of the married people was considerably decreasing in comparison to the number of divorced and widowed people.

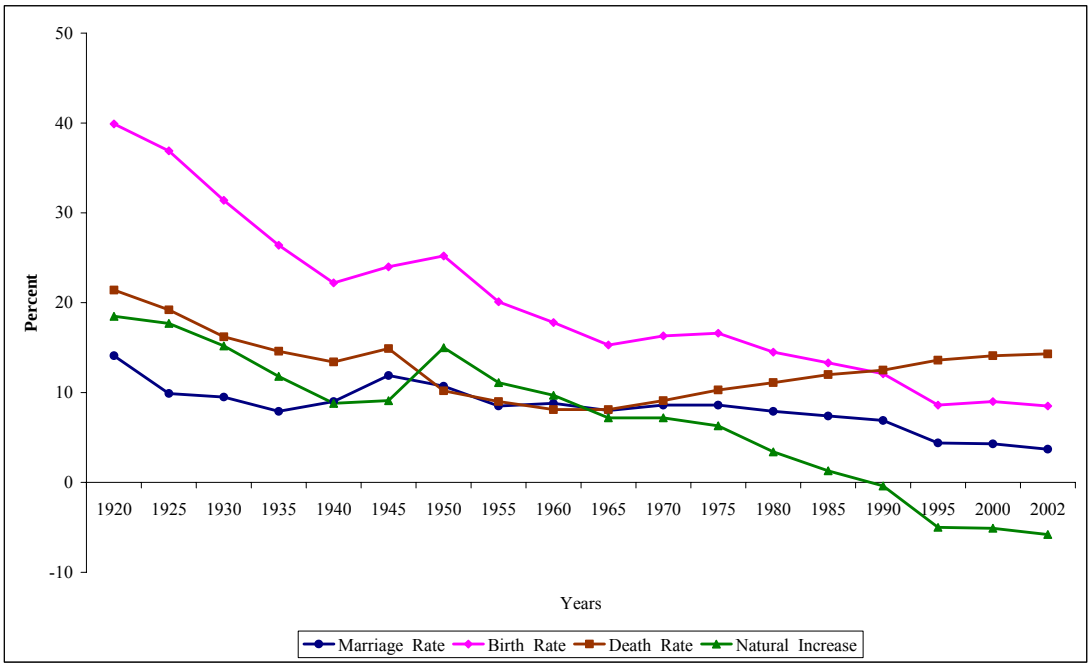
Figure VI.2.b.1. Marriages and live births, Bulgaria, 1910-2001 (Number)



Source: NSI, 1995, 2003(a).

Figure VI.2.b.1 shows the number of marriages and live births for 1910-2001 period, which reflects the parallelism between two indicators as well. In any case, the number of births is quite higher than the number of marriages. While number of marriage is declining in the country, number of legitimate births is accompanying it. Since 1989 decline in marriages and live births has been continuing, the slight increase in the beginning of 2000s appears as a "non-functional increase" due to the immediate decline following itself. As for Figure VI.2.b.2, it is a summary of the demographic developments in pre-and post-transition Bulgaria. Death rate is the only indicator that is rising. Although marriage rate, birth rate and natural increase gradually decreased by the end of 1980s, the breaking points of the "lines" should be seen as a result of "transition effect".

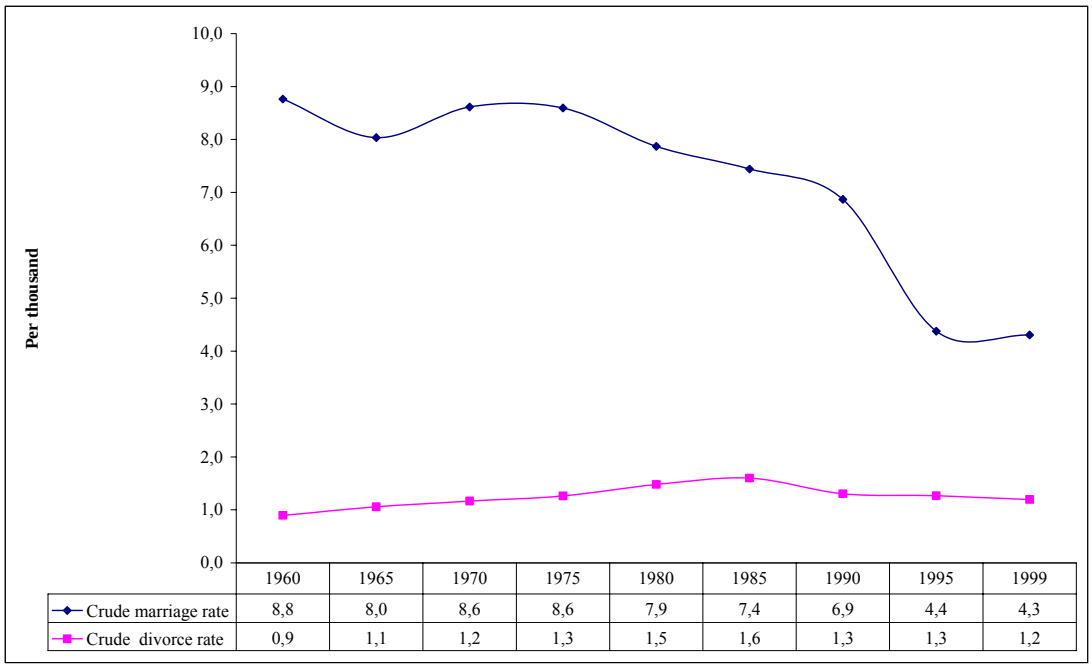
Figure VI.2.b.2. Crude marriage rate, birth rate, death rate and natural increase, Bulgaria, 1930-2002



Source: NSI, 1995, 2003(a).

The proportion of divorced and widowed persons has increased contrary to the marriages: while percentage of the former was about 3 percent in 1985, it rose to 4 percent in 2001, the latter was about 7 percent in 1985, and it reached 9 percent in 2001. In other words, the number of marriages in 2001 fell 2,5 times compared to 1970 (Figure.VI.2.b.3). Surely, effect of the increase in the number of cohabitations, which is prior to marriage and becoming a dominant model in society, on marriage and divorce rates is undeniable. Today, particularly young Bulgarians are much less likely to marry than their parents and more likely to divorce if they are married. Crude marriage rate accompanies to the number of marriages given in the previous figure: They have decreased sharply while crude divorce rates have risen. More than a third of all marriages were ending with divorce and as a natural presumption; number of families has been dropped by 170 000 in 1999-2001. According to Vassilev (1999 and 2003) due to the worsening divorce ratio, the number of single-parents speedily increased and reached six fold from 1985 to 2001.

Figure VI. 2.b.3. Crude marriage rate and crude divorce rate, Bulgaria, 1960-2000

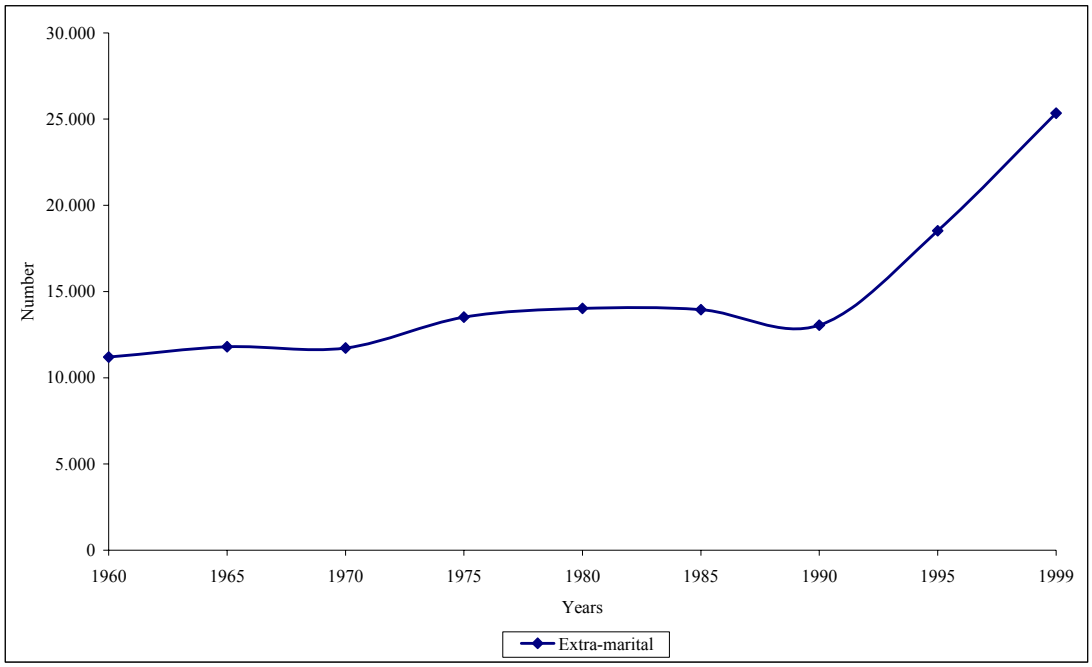


	1960	1965	1970	1975	1980	1985	1990	1995	1999
Crude marriage rate	8,8	8,0	8,6	8,6	7,9	7,4	6,9	4,4	4,3
Crude divorce rate	0,9	1,1	1,2	1,3	1,5	1,6	1,3	1,3	1,2

Source: NSI, 1990, 1995, 2003(a)

Expectedly, the increase in number of single-parents due to low divorce rates and increasing number of cohabitation disposing of marital family's destiny have resulted in extra-marital childbearing. In Bulgaria housing supply and tax reduction for single-parents encourages extra-marital fertility (Philipov, 2002; Kostova: 2000). On the other hand, if we handle the issue with the Philipov's approaches (2000, 2002) on extra-marital fertility in Central and Eastern Europe; the first reason for increase in extra-marital fertility in this country is that there are larger subpopulations certain social and ethnic groups whose have traditionally extra-marital fertility such as Bulgarians and Gypsies and also Turks who are not fundamentally religious. The second reason is the non-practicing of contraceptive behavior, especially among teenagers. The third one is that childbirth mostly goes before marriage. After childbirth, the couples can transfer from a non-marital union to a marital union which is judicially approved.

Figure VI.2.b.4. Extra-marital births, Bulgaria, 1960-1999



Source: NSI, 1990, 1995, 20003(a)

Figure VI.2.b.4 demonstrates the trend of extra-marital births between 1960 and 1999. From 1960s to 2000s, extra-marital fertility has always been practiced. In 1970 the number of extra-marital birth was 11.726; in 1985 it rose by 13.954. But its pace of increase after the announcement of the transition (1989) is noticeable; the difference between 1990 and 1999 was 12.292. The great effect of the transition period on the extra-marital births does not need to be discussed. Philipov (2002) suggests that main social reason of the rise in extra-marital births increase in new tastes and preferences and breakdown of traditional norms and behaviors in the society. In the beginning of 1990s, the mentioned breakdown occurred in all the institutions which was important parts of the cultural and traditional structure in the country and reflected to the close ties connecting people. The family ties and the joy of becoming parent began to change its natural dimension along with the social customs.

Table VI.2.b.2. Mean age at first marriage and mean age at childbirth by years, 1960-1999

Year	Mean age at female first marriage
1960	21.3
1965	21.4
1970	21.4
1975	21.4
1980	21.3
1985	21.4
1990	21.4
1995	22.6
1999	23.5
	Mean age at childbirth
1960	25.1
1965	24.7
1970	24.5
1975	24.4
1980	23.9
1985	23.9
1990	23.7
1995	24.3
1999	24.7

Source: NSI, 2003

While the extra-marital births have been increasing since 1990, mean age at female first marriage has accompanied them (Table VI.2.b.2). While mean age at first marriage is around 21 between 1980 and 1990, it rises to 23.5 in the end of 1990s due to the tendency towards the postponement of marriages. Mean age at childbirth which was 23.9 in 1980 rises to 24.7 in 1999. So, the postponement of marriages is most likely related to the postponement of childbirth. The decline in mean age at first marriage begins in the first quarter of 1960s while mean age at childbirth began to decline in 1980s, the final ten years of the communist regime and

preparatory times of the labor-market economy. The postponement of marriage picked up speed after 1990 and mean age at childbirth followed it.

In Bulgaria it is a fact that, although marriage is not considered as a necessity to have a child, the studies on the attitudes of women to marriage and cohabitation confirm that most of the Bulgarian women who want to have a child prefer to become legally married. There is a reverse relationship between cohabitation and educational level: Women who have higher educational degrees want to become legally married compared to less-educated women.

The diagnostic influence of education and career on childbearing decisions, effects of pronatalistic policies, high predictability of the life course and lack of the opportunities, function of family, and scarce modern contraception coupled with relatively easy-accessible abortion before 1990 (Sobotka, 2003) should be taken into consideration while the decrease in fertility and postponement of marriages evaluated periodically. Because with the breakdown of communist regime, the pronatalist practices were left and new social and family policies have started to prevail. The reforms demographically brought prevalence of modern contraceptive methods, free sexual life and abortion was more liberalized. On the other hand, economic and institutional changes, new culture of consumption, prolonged education and new working conditions determined new attitudes to family and childbirth (Sobotka, 2003; Philipov, 2000). Before 1990, in Bulgaria typically about 15 percent of young people were attending to the university. However, the transition period necessitates new professions and occupations and many young people, particularly young women, have demands on the attendance to the secondary schools and universities, whose numbers has increasing rapidly. The proportion of women who want to study in the universities is more than men.

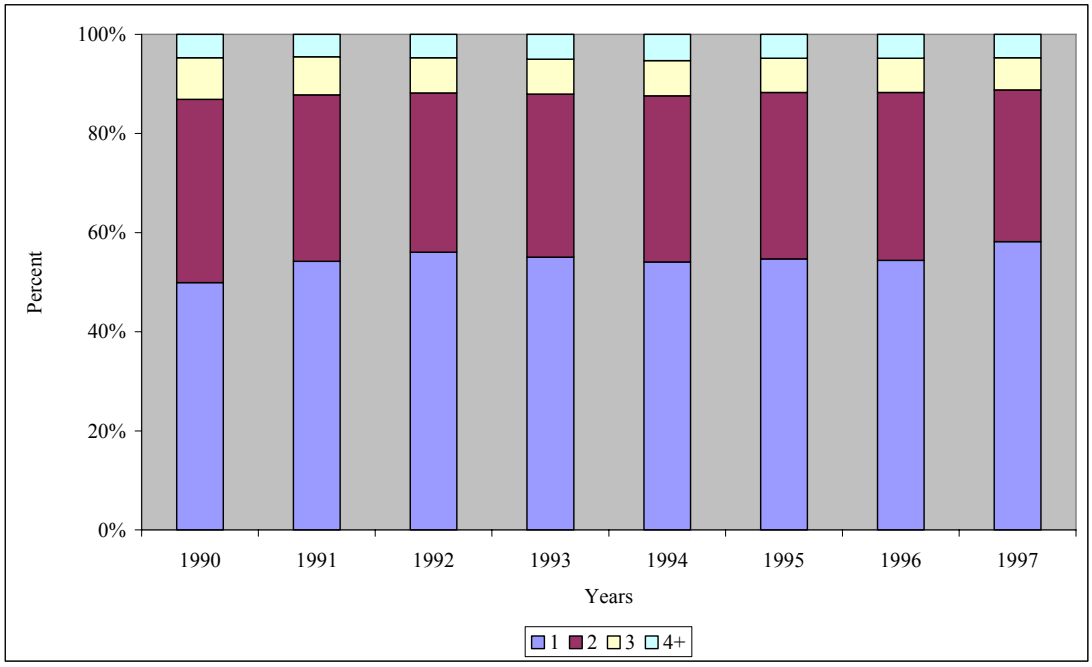
According to Sobotka (2003),

> *"The women with university diploma are putting more emphasis on career and non-family interests and have on average fewer children than those who are less educated"*

The Bulgarian woman is one of them. The most of young Bulgarian women prefer to have a career at this time. The position at work, income, a powerful desire for the career and "opportunity costs" (Becker, 2000) of childbearing are more important for the well-educated women. Therefore they want fewer children.

Bulgarian laws use the traditional definition of family and ignore new family forms in the country. The Law on Family Benefits, which regulates the child allowances and their eligibility, defines family as a unit included spouses, children under 18, as well as children who have completed 18 years but still study at the secondary school level but no later than reaching 20 years of age (Kotzeva, 2005). However, this definition lost its effects on the society, particularly on the new generation a long time ago and the transition in 1989 accelerated the process of leave traditional family values.

Figure VI.2.b.5. Percentage distribution of the births in post-transition Bulgaria, 1990-1997



Source: NSI, 2003(c)

While there were about 50 percent single-births in 1990, the percentage rose by 58 percent in 1997 (Figure VI.2.b.5). However, there was 37 percent "second birth" in 1990 but share of them in all the births fell by 30 percent in 1997. The third child is quite rare in post-transition Bulgaria; the proportion was around 8 percent in 1990 and it fell by less than 7 percent. Unquestionably, such a situation brought about the decreasing proportion of the extended families including three or more children. Most of the extended families in post-transition Bulgaria are crowded just because of the married children living with their parents in order to live on.

Table VI.2.b.3. Percentage distribution of the families in Bulgaria by number of members, 1965-2001

Total	**1965**	**1975**	**1985**	**1992**	**2001**
2	38.9	42.0	42.9	44.6	45.9
3	30.2	28.8	26.3	26.8	29.9
4	24.4	24.3	26.2	24.7	21.4
5	4.2	3.6	3.5	3.0	2.2
6	1.4	0.9	0.7	0.6	0.4
7+	0.9	0.5	0.4	0.3	0.2
Total	100	100	100	100	100
Urban					
2	30.9	34.5	37.1	39.0	41.4
3	35.2	33.4	29.6	30.1	33.3
4	29.1	28.7	29.8	27.8	23.1
5	3.3	2.7	2.7	2.5	1.8
6	0.9	0.5	0.5	0.4	0.3
7+	0.6	0.3	0.2	0.2	0.1
Total	100	100	100	100	100
Rural					
2	45.1	51.6	53.2	55.6	55.6
3	26.3	23.1	20.5	20.4	22.6
4	20.8	18.6	19.8	18.7	17.7
5	4.9	4.7	4.8	3.9	3.0
6	1.8	1.3	1.1	0.9	0.7
7+	1.1	0.7	0.6	0.5	0.4
Total	100	100	100	100	100

Source: NSI. 2003(b)

The figures in the table VI.2.b.3 are obtained from a special publication of National Statistical Institute (2003b), namely *Semeistva (Family)* and it demonstrates description of the families by number of the members. There is a gradual increase in number of the families with two members. Exactly, according to the figures referring to the census years; 1965-2001, percentage of the families who have five members or more gradually decrease in the urban and rural areas. In 1985, 37 percent of the families have two members and are living in urban areas. It reaches to 41 percent in 2001.

As for the rural areas, in 1985, about 56 percent live in rural areas and have two members. In the same year, there were about 30 percent families having four members and living in urban areas while this percent was 20 percent for the families having four members and living in rural areas. In 2001, around percent of the families have two members and live in urban areas whereas about 56 percent have two members and live in rural areas.

Between 1985 and 2001, the increasing percentages of the families with two members and living in urban areas should be separately taken into account. The general increase in the percentages of families with two and three members and living in the urban areas are most probably the results of rapid urbanization, industrialization and, new living arrangements determined by socio-economic conditions occurred especially after the transition.

Table VI.2.b.4. Percentage distribution of the families in Bulgaria by number of children and religious groups, 2001

	No child	1	2	3	4	5	6+	Total	N
Total	**58.6**	**24.5**	**14.8**	**1.6**	**0.3**	**0.1**	**0.1**	**100**	**2369100**
Eastern orthodox	60.8	24.3	13.5	1.1	0.2	0.1	0.0	100	1970952
Catholic	60.7	22.0	15.7	1.3	0.2	0.1	0.0	100	13538
Protestant	37.0	26.0	24.0	8.8	2.6	1.0	0.6	100	11427
Muslim	48.8	24.6	21.7	3.9	0.8	0.2	0.1	100	290657
Other	54.8	25.5	15.8	2.6	0.9	0.3	0.1	100	4622
Unknown	43.9	28.9	21.1	4.0	1.2	0.5	0.3	100	77904
Bulgarian	**61.1**	**24.3**	**13.5**	**0.9**	**0.1**	**0.0**	**0.0**	**100**	**2010841**
Eastern orthodox	61.6	24.2	13.2	0.8	0.1	0.0	0.0	100	1908800
Catholic	62.8	21.1	15.2	0.8	0.0	0.0	_	100	12011
Protestant	49.1	25.9	19.4	4.2	1.0	0.3	0.1	100	3916
Muslim	52.6	22.1	21.7	3.1	0.4	0.1	0.0	100	40342
Other	56.9	27.9	12.3	2.1	0.6	0.2	0.1	100	1248
Unknown	49.3	29.5	19.2	1.6	0.3	0.1	0.0	100	44524
Turkish	**49.6**	**24.9**	**21.4**	**3.3**	**0.6**	**0.2**	**0.1**	**100**	**224205**
Eastern orthodox	37.0	27.0	26.5	7.0	1.9	0.4	0.3	100	1507
Catholic	51.4	24.3	20.0	3.3	1.0	_	_	100	695
Protestant	28.7	28.7	27.3	10.9	3.3	0.9	0.2	100	578
Muslim	50.0	24.8	21.2	3.2	0.6	0.1	0.1	100	215045
Other	44.7	24.2	25.0	4.5	1.5	_	_	100	132
Unknown	40.2	29.9	24.2	4.8	0.5	0.2	0.2	100	6248
Pomac	**32.5**	**25.8**	**25.2**	**10.6**	**3.6**	**1.4**	**0.9**	**100**	**99850**
Eastern orthodox	32.1	25.5	25.2	10.8	3.9	1.5	0.9	100	48286
Catholic	23.8	25.7	26.4	15.1	5.3	2.6	1.1	100	265
Protestant	30.7	25.6	26.4	11.5	3.6	1.5	0.9	100	6672
Muslim	34.7	26.5	25.2	9.4	2.7	0.9	0.5	100	29034
Other	29.7	24.4	28.3	9.8	5.2	2.0	0.6	100	501
Unknown	31.0	25.4	24.8	11.6	4.2	1.8	1.2	100	15092
Other	**51.0**	**27.0**	**18.1**	**3.0**	**0.6**	**0.2**	**0.1**	**100**	**18265**
Eastern orthodox	51.2	26.7	18.0	3.3	0.6	0.1	0.1	100	11376
Catholic	46.5	35.1	16.2	1.8	_	0.4	_	100	501
Protestant	42.8	29.4	20.9	4.0	2.0	0.5	0.5	100	201
Muslim	43.0	27.7	23.9	4.2	0.7	0.4	0.0	100	2456
Other	59.4	24.4	14.5	1.5	0.2	0.0	_	100	2705
Unknown	49.9	31.2	15.9	2.3	0.5	0.2	_	100	1026
Unknown	**43.4**	**29.0**	**22.7**	**3.6**	**0.8**	**0.3**	**0.2**	**100**	**15939**
Eastern orthodox	42.3	29.6	20.7	5.1	1.6	0.5	0.2	100	983
Catholic	34.8	40.9	19.7	3.0	1.5	_	_	100	66
Protestant	13.3	53.3	28.3	5.0	_	_	_	100	60
Muslim	50.6	23.1	22.1	3.5	0.5	0.1	0.1	100	3780
Other	25.0	44.4	30.6	_	_	_	_	100	36
Unknown	41.3	30.7	23.1	3.5	0.9	0.3	0.2	100	**11014**

Source: NSI, 2003(b)

Table VI.2.b.4 includes percentage distribution of the families according to their religious characteristics. These families refer to the "marital families" whose marriages are officially approved and also the children that are included in the table are under 18. In other words, the table does not include the families who have children above 18 and during the interpretations this limitation is taken into account. In Bulgaria, approximately 59 percent of the families have no child; about 25 percent have one child and about 14 percent have two children. Totally, percentages of the Eastern Orthodoxies and Catholics who have no child are around 61 percent. As for Muslims, about 49 percent of them have no child. 26 percent of Protestants have one child; 24 percent have two children and 9 percent have three children. The percentages which reflect the Protestant families who have no child is the lowest and who have one or more child(ren) are the highest figures among the others.

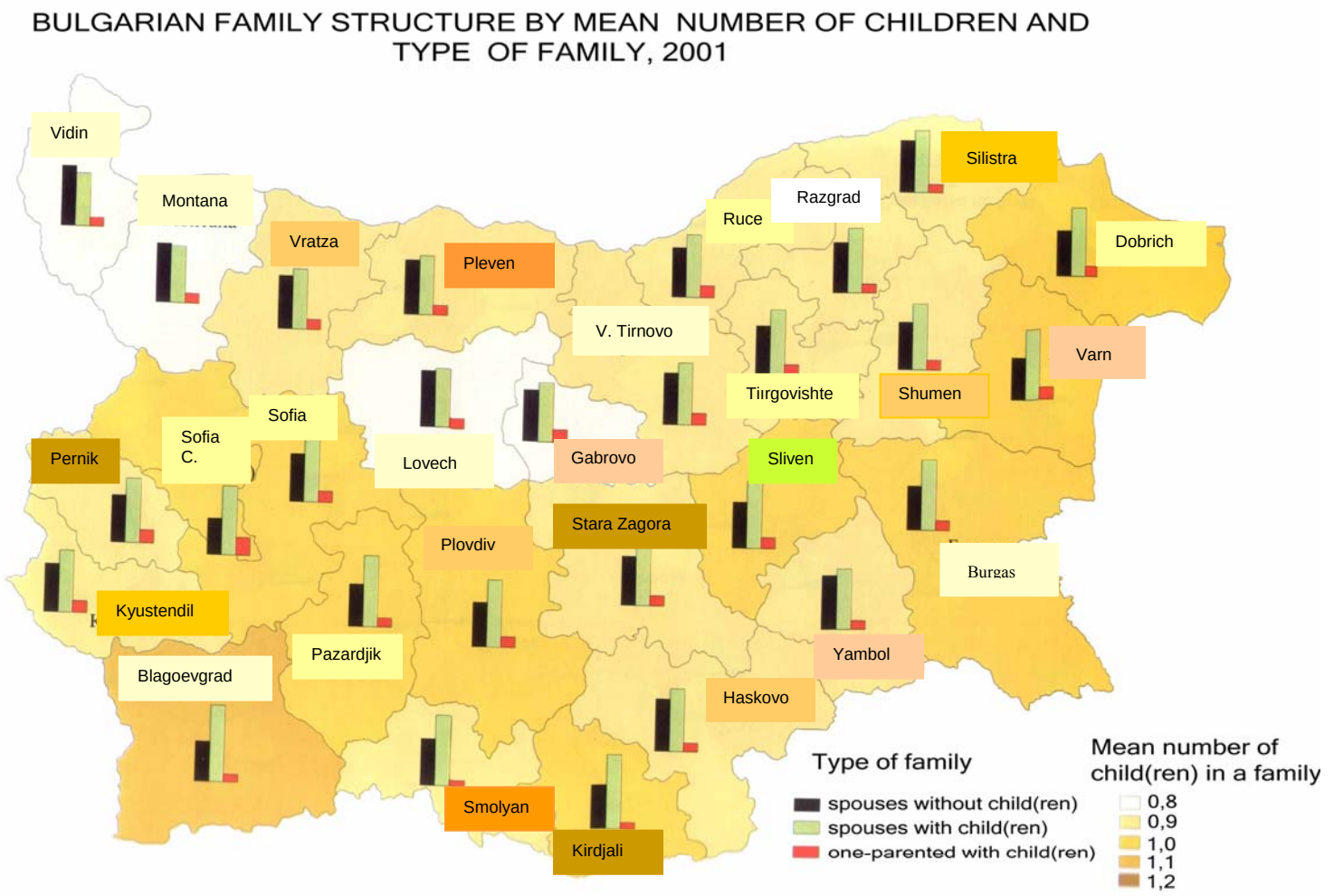
While the ethnic groups are separately evaluated according to their religious characteristics, it is seen that about 62 percent of the Bulgarian-Eastern Orthodoxies have no child whereas about 63 percent of the Bulgarian-Catholics have no child. Percentage of the Bulgarian-Muslims who have no child is about 53 percent. Percentage of Bulgarian Protestants who have no child is 49 and this is the lowest value among the others. The percentage of Bulgarian-Eastern Orthodoxies who have one child is 24 percent, whereas the percentage of ones who have two children falls to 13 percent. As for Bulgarian Muslims, 22 percent have one child; about 22 percent have two children and 3 percent have three children. The percentage of the Bulgarian Muslims who have three children is 4 times more than the Bulgarian-Eastern Orthodox families. Generally, half of the Turkish-Muslims have no child and more or less 25 percent have one child. But interestingly, percentage of Turkish-Eastern Orthodox families who have no child is quite less that of the Turkish-Muslims (37 percent). Proportion the Turkish-Protestants who have one child is 29 percent and this is the lowest value in the group of ethnically Turkish families. When it comes to Pomac families, the situation is not different; 33 percent of the Pomac-Eastern Orthodoxies have no child and about 26 percent have one child. Share of the Pomac-Muslims who have no child is about 35 percent and about 27 percent have one child. On the other hand, it is noticed that proportions of the Turkish families and Pomac

families who have two or three children are quite higher than that of Bulgarian families.

Map VI.2.b.1 arranged by the mean number of children and type of family and presents Bulgarian family structure. The green bars indicate that in general there are spouses with children in the country and most of them have about one child (0,9). The black bars show spouses without children and their locations mostly East and South-West Bulgaria. Number of one-parented families is lower than the others.

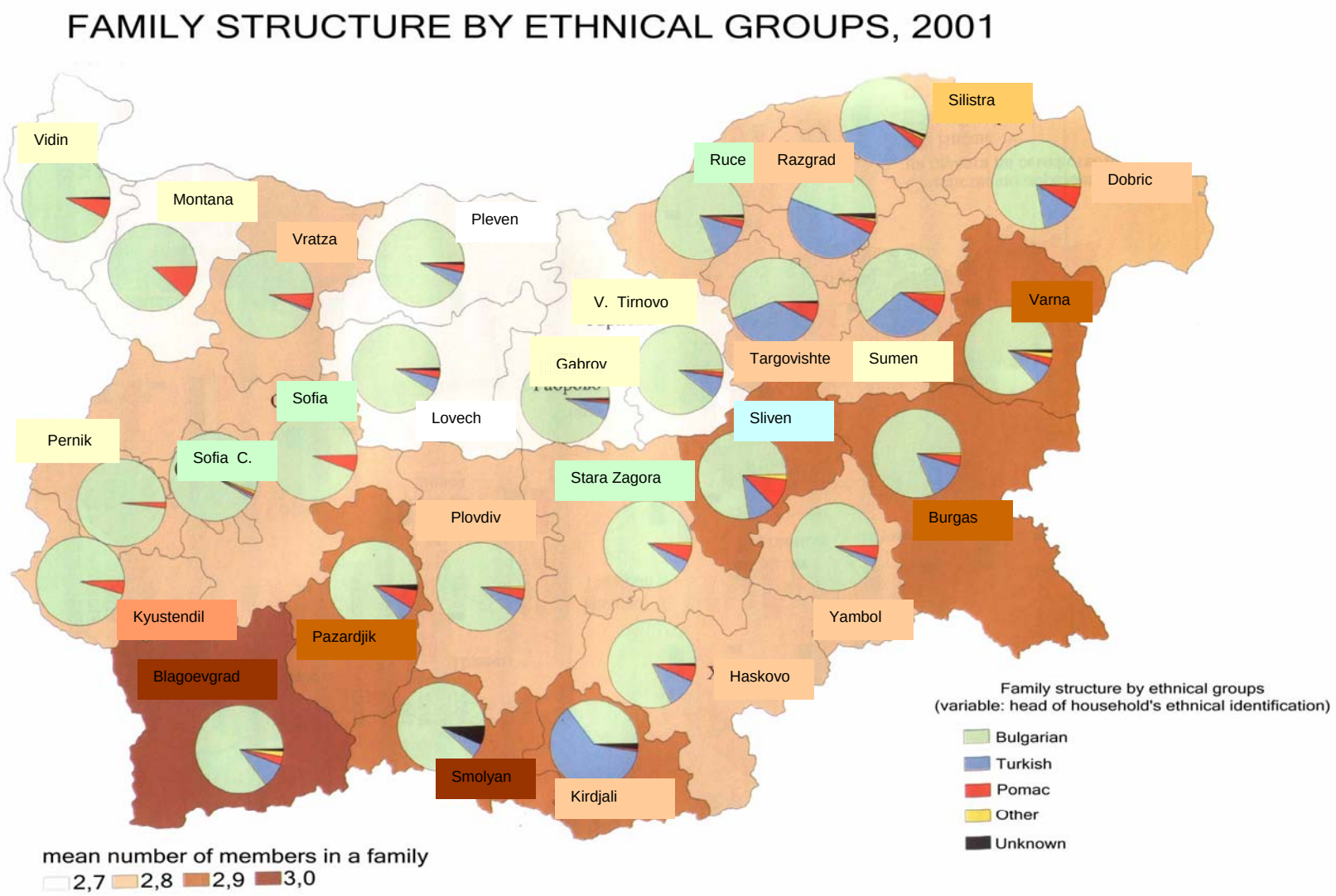
Map VI.2.b.2 shows the ethnically classified families. According to the regions, in the north-east Bulgaria and in Kırcaali in the south-east Bulgaria where Turkish people live, mean number of members in a family is between 2,8-2,9. For Bulgarians, the mean is 2,7 or 2,8 and the Pomac families in red triangles have 2,8 members. Gypsy people are not covered by the map; they live in almost everywhere in the country. The yellow rectangle that refers to “other” may be considered to include “Gypsy”, however, it seems too small as regards the Gypsy population. The darkest region in the map is most probably the region that Macedonians live; they are also not mentioned in the map. They have mostly families with three members.

Map VI.2.b.1



Source: NSI, 2003(b)

Map VI.2.b.2



Source: NSI, 2003(b)

In conclusion, Bulgarian people faced with many changes due to the transition. Fertility, mortality, nuptiality, family patterns and many economic, social, institutional and traditional characteristics have been changed and they lost their old trends and functions. The changes in GDP figures and other key indicators of Bulgarian economy such as critical changes in the unemployment rates, revenues, inflation, expenditures and low purchasing power, harmed people's ordinary life conditions. Pace of impoverishment and unemployment rate are much higher than other EU accession countries. All demographic and social studies and evolutions mentioned so far show that the age structure of the country has been rapidly shifting. Elderly-mortality and emigration of the active and young population cause a rapid shrinking of the age groups and take Bulgaria to an inevitable end. Both pace of fertility decline and increasing mortality are directly related with the transition. Number of live birth has been decreasing speedily since 1990 and mortality rate in the country has increased due to the difficult and poor living standard in particular for the elderly population. Marital births have changed place with extra-marital births because of breakdown of the social norms and values, hence rate of extra-marital births is extremely high. Mean age at first marriage is about 24 in 1999 and mean age at childbirth is about 25. New economic and social conditions brought about many educational opportunities for young people especially for young women. The attendance to secondary school and universities has become important to obtain profession and occupational career. Today the number of working women in Bulgaria is more than men and women have postponed childbearing and marriage to advance in their career. Most of them prefer to become in cohabitation instead of legal marriage unless they want to have children. The crowded families replaced with the families with one or two child. The families with three or four members generally live in urban while families with two members live mostly in rural areas. Also for number of ethnically Christian families with three or more children is exiguous. Turkish majority and other ethnic groups which accept Islamic rules have preferred more children. But the reality is that post-transition Bulgaria has been loosing the characteristics of two-child family type and goes forward becoming an older and "childless" society.

So, what are the solutions? According to Kotzeva (2005), family formation in post-transition Bulgaria requires seven measures:

a. To provide stable labor market with low youth employment
b. To prevent or minimize discrimination of young mothers in the labor market
c. To provide flexible employment
d. To overcome negative impact of motherhood on wages
e. To overcome double workload for women
f. To provide high quality childcare
g. To promote and support the moral climate of responsible parenthood

CHAPTER VII. DATA AND DATA QUALITY

Fertility and Family Survey is one of the projects of Population Activities Unit (PAU) of the United Nations Economic Commission for Europe (UNECE) in order to find out developments of partnership and reproductive behavior. It was realized in twenty ECE countries, supplied national FFS Standard Country Reports and resulted in various cross-country comparative studies. Bulgaria is one of the twenty countries. FFS was conducted in December, 1997 in this country.

While the FFS standard questionnaire is applied to the different country contexts, its rich content has to be changed. The questionnaire of the Bulgarian context is also revised and used such a sorting method. In particular, the biographical items in the national (country) FFS questionnaire are significantly different from FFS model questionnaire.

The main characteristic of the data is that the financial restrictions did not allow constituting a large sample size. The sample size is 2367 and covers females only (aged 18 to 45), in other words, the sampling unit of the data is the individuals (women). According to the original report of the survey (2001), 25 of 2367 women are in fact out of this age range, being either 17 (3 cases) or 46 to 48 years old, and in 4 cases the age was not recorded. The 22 cases of women aged 46 to 48 were grouped with those aged 45 and are therefore included in the totals of the tables.

FFS- Bulgaria questionnaire has omitted biographies such as leaving home, partnerships (there are catalogued events but not dated, except first marriage), other pregnancies, contraception, education and occupation are the modules which have omitted biographical components. Further, there is no partnership biography[22].

[22] However, it should be considered that the questionnaires of the twenty-four countries have many different and omitted (or extra) biographical items, too. Only seven of them (Czech Republic, Greece, Hungary, Latvia, Lithuania, Slovenia and Spain) adhered almost precisely to the model questionnaire For instance, in Austria; other pregnancies and contraception, in Poland; other children and contraception, in Belgium; contraception and education, in Czech Republic; contraception, in Estonia other children, contraception and occupation are the omitted biographies (Festy and Prioux, 2002)

The standard FFS questionnaire was taken as a base for the questionnaire, but only the core sections of it were used. A small number of questions were modified since the contents of the questions were appropriate to the Bulgarian context. Parent's separation and partnerships modules were applied as in the standard questionnaire. There is no question on independence (Respondent first leaving parents to start living on his/her own, or parents leaving, or respondent acting as head of household[23]). Residential history, (Different addresses at which respondent lived for 3 months or longer, since reaching 15 years of age) and start and end of partnership (Start and stop living in the same household. Forced LAT is considered as end of partnership) are also not used as separate modules by FFS-Bulgaria. Festy and Prioux from INED Paris, the scientists who presented "An evaluation of the Fertility and Family Surveys Project" in 2002, suggest that FFS model questionnaire suggests that natural children born alive and adopted, step-and foster- children are distinguished. No minimum duration for "other children". But FFS-Bulgaria does not specify "born alive", natural children are not at top of the list. The questions on the usage of contraceptive methods (The respondent or partner doing or using anything to avoid becoming pregnant. History: using method for 3 + consecutive months) are same with the questions in standard questionnaire. However, there is no history. Definition of education in FFS-Bulgaria (Attending school after 15. No minimum duration for each period or each interruption. No definition of "next studies") reflects only total schooling duration and highest degree. Occupation (3+ consecutive months; unpaid work in family business or procedures' cooperatives incl.; two simultaneous jobs possible. No minimum hours worked. No clear definition of change) is also included by FFS Bulgaria, but there are questions just on the present job. Nevertheless "Gaps" (No minimum duration for gap between 2 jobs; can have jobs for less than 3 months) module is not applicable (Festy and Prioux, 2002).

As indicated previously, some of the questions in the model FFS were changed and used with their new designs in order to provide an appropriation with Bulgarian context. Table VII.1 shows the changed variables during the survey (Philipov, 2001).

[23] The definitions within the brackets were taken from the "An evaluation of the Fertility and Family Surveys Project. By Patrick Festy and France Prioux. INED, Paris. UN. New York and Geneva 2002. These definitions are the standard definitions of the FFS Project.

Table VII.1. The reconstructed variables[24] from the standard FFS questionnaire

Variable 812	Has had a job for three or more months at the moment of interview.
Variable 806_01	The classification of subject-matter studied is different from the standard one.
Variable v809a_01	Number of years studied, independent of whether the education is completed or not.
Variables v813m_01, v813y_01, v813a_01	Month, year, and age at start of last job.
Variable v816_01	Profession at last job. The classification of professions is different from the standard one.
Variable v405	It gives the number of pregnancies that were miscarried, aborted, or ended in a stillbirth.
Variable v410_(i)	It is not empty, although the dates of ending the pregnancies were not asked.
Variables 701 and 702:	There are three additional (possible) answers. The first answer is coded as 0; the second as 1, etc. because the answer of "Don't know" refers to 7.

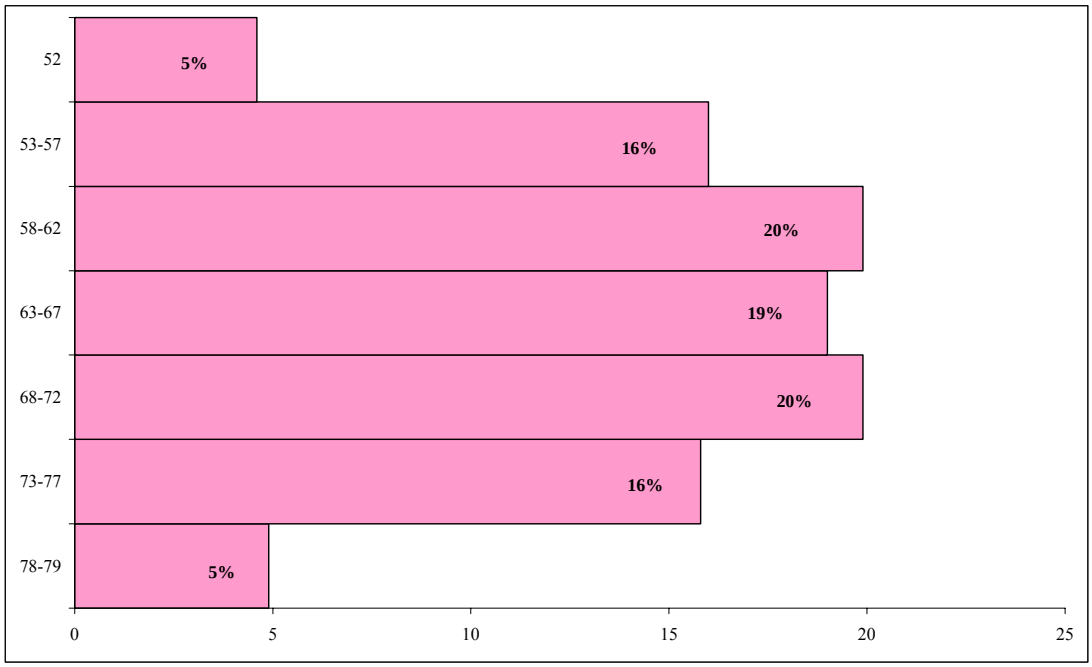
[24] In order to avoid possible mis interpretations, all reconstructed variables were placed into this section with the same expressions in the original report.

The data are inaccurate due to respondents' underreporting: the pregnancy module should not be used. If used, the researcher by any means should get in touch with the authors. This study does not use this section, either.

The data have a self-weighted sample (Philipov, 2001) and the non-response rate of the survey is 9 percent.

Generally, there is certain degree of suspicions about the nationally representative characteristics of the data. During any study or assessment, it will be useful to compare the results on basic population characteristics with the national census data, especially with the results of the census which was carried out in 1992 (Philipov, 2001). The demographic situation in the country changed dramatically during the 5-year period between the census and the survey and, according to the scientists who were presented the original report of FFS-Bulgaria, the impact of this change cannot be delineated from the effect of the sampling procedure on the quality of the survey data.

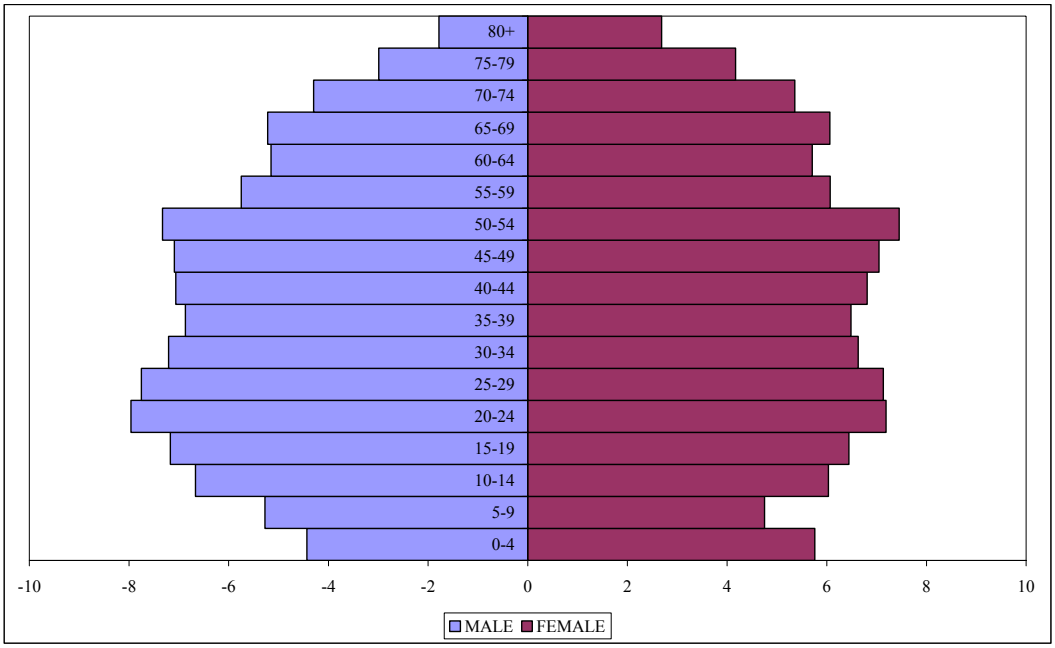
Figure VII. 1. Age structure of FFS-Bulgaria, 1997



Data Source: Philipov, 1997

As regards data quality, in the first place, the age structure (Figure VII.1) is compared with the age structure of 1997 national statistics (Figure VII.2). The population pyramid of 1997 is a good example for an aging population which has very low fertility, a widening body and an increase in "65+" population. FFS Bulgaria covers the respondents at their reproductive ages: 5 percent of them refer to 18-19 and 45-49 age groups; about 60 percent of the survey population accounts for the 25-40; 20-24 and 40-44 age groups are about 16 percent each and age group 30-34 is 19 percent.

Figure VII. 2. Age pyramid, national statistics, Bulgaria, 1997



Source: NSI, 2000

By placing the age structure of the FFS survey into the age pyramid of 1997, it is possible to see the proportional nearness of the sample to the age proportions of the population. As shown in Figure VII.2, the proportions of the respondents at their mid-reproductive ages seem compatible with the age structure of the national statistics. The proportions of the age groups which are considered as the limits of reproductive age (18-20 and 45-49) are less than the others but proportionally equal each other. Same situation is current for the women aged 25-29 and 35-39.

The proportional variations normally result in the unexpected outcomes during the analysis. For instance, if the number of non-marital cohabitations is widespread among the women born after 1970s, solely because of the proportional differences, the researcher can obtain unreliable results. Unfortunately, FFS survey includes similar problems.

Table VII.2. Proportions of urban and rural samples according to the FFS results and the national statistics, Bulgaria, 1997

	FFS, 1997	NS, 1997
Urban %	68	70
Rural %	32	28
Total	100	100

On one other hand, as a way of evaluating data quality, proportional distribution of the place of residence is examined (Figure VII. 3 and Figure VII.4). When comparing the proportions of the urban and rural samples of the survey with the national statistics in the same year, the results also show a very appropriate structure for the demographic analysis.

With regard to Table VII.2, percentage distribution of the live births by age groups can be found as thought-provoking. It can be expected that the recorded live births for the women aged "under 20-24" have more proportion into the survey total.

Table VII.3. Percentage distribution of live births according to age groups of the women, FFS results and the national statistics, Bulgaria, 1997

	FFS, 1997	NS, 1997
Age Groups	Live births	Live births
under 20	0,4	10,6
20-24	8,4	43,5
25-29	20,7	31,0
30-34	21,8	10,8
35-39	24,0	3,4
40-44	19,3	0,7
45-49	5,4	0,0
Total	100	100

Source: Philipov, 2001

Proportional distributions of the live births, especially of the live births that belong to the very young women are really important for oversensitivity of the subject of this study. Increasing extra marital births, which are occurred into the non-marital unions and serve to “extra family” reality, occur at “under 20” and early 20s. Such a situation can create a doubt about the number of live births in extra marital unions. But at the same time, it should be remembered that also number of the reported extra marital live births into the survey data is less than the expected, as met in many different country contexts.

In summary, the survey data should not be considered as completely inappropriate data in terms of sampling and its representative aspects. Because the aim of the dissertation is to fix social and demographic determinants of family formation, that is to say, it is more interested in the preparatory stages of family building than the number of live births in a family union. Moreover, the data can provide significant values on the determinative effects of social and demographic developments in the country on the childlessness and the intention to have a(nother) child of the women.

CHAPTER VIII. METHODOLOGY

VIII. 1. a. Theoretical Approaches and Improvement of the Study

Improvement of the dissertation is thought in the frame of common principles of methodology of social sciences. While the steps on the social and demographic determinants of the family formation in post-transition Bulgaria are developed, the main objectives are to determine how the social breakdown of the post-transition society has realized so far; what kind of relationship there is between changing demographic structure due to the "lowest-low" fertility and rapidly rising postponement of marriage and how such developments affect the options of family building in particular the intentions to have child(ren) in the country .

First of all, the social and demographic roots of the postponement of marriage and childbearing are examined by the time-periods which welcome the "heralds" of the second demographic transition in Bulgaria. In other words, the penetration of the second demographic transition theory into Bulgarian context is examined once more. On the other hand, the economic approaches to fertility, especially approaches of Becker (1991, 1992, 1993 and 2000), Lestheaghe (1986, 1998, 2000) and Easterlin (1978, 2001, 2004) contribute to describe economic dimension of the transition and women's varying expectations accompanied by the changing attitudes to family formation/childbearing together. The ideational changes which are explained by the social and cultural approaches and the ideational aspects of the family formation patterns in post transition-Bulgaria are also discussed.

With the purpose of constituting a well-built background to the social and demographic events coming across to 1990s, the economic developments, education policies, family policies, family, and marriage patterns are discussed for a long period of time: 1945-1990s. Especially the statistical indicators based on the censuses and studies of the international offices in Sofia, the capital, give the study opportunity of evaluating pre- and post- developments in the society of Bulgaria.

With respect to the necessity of theoretical interpretation of the methodology, first of all it should be remembered that the social researches are mostly conducted by following -a) the "classical method" or b) the statistical and inductive methods.

a) The classical approach (deductive-nomological model): At the outset, some hypotheses based on a theory or a model, are formed. They are the generalizations or axioms on the given systematic issue. Then, the researcher tests whether the relationships expressed by the hypotheses fit into the social realities or not.

b) The statistical and inductive approaches: By dispensing with all the generalizations or axioms on the given systematic issue, theories and models approved them, and previously formed hypothesis, the social scientist directly absorbed in the concrete social reality which she/he would like to detect and uses her/his ability to observe a social event and environment and determines some variables and in the end, in order to see some scientific relations (similarities, differences, varieties etc.) among the variables, she/he tests them and forms the hypotheses. The last step is to compare them with the social facts once more. Thus, she/he accepts/rejects some of the relations which are appeared.

Briefly, the social researcher who wants to follow the classical method has to follow these stages: 1) Hypothesis 2) Observation 3) Test. The social researcher who accounts for her/his scientific method according to the principles of the field survey has to follow three stages again: 1) Observation 2) Hypothesis 3) Test (Çelebi, 2004).

The continuity of the roles and long-term existence of a structure of inter-relations into a social group bring forth a "social institution", and family is the most "genuine" of them. There are many examples of the studies on the family matters. The "studies on the relationship between family and other social institutions" and/or the "studies on the relationship between family and the society" are the well-known examples of the methodology based on the classical approaches. However, studies on the functional ties among the social institutions, the studies which emphasis positive and/or negative effects of the social processes on these ties, the studies that have

some assumptions on the developing relationships between family, modernization and modernized social institutions and, the studies which accept that all the long-term differentiations within the family institution are the expected consequences of the principle of evolution, are usually on agenda. Specifically, the functionalist, evolutional and historical materialist studies have preferred classical approaches (Çelebi, 2004).

At the same time, studies on the relationships among family members use the methodological stages based on the principles of field-survey. The researchers who are interested in the well-defined roles of family members (expected roles, fulfilled roles, social relations of each member with the others and society) uses "participant observation" in order to investigate the familial characteristics and the social interaction between the family and environment from within. (Çelebi, 2004).

This study uses the classical method. The hypotheses of the dissertation are formed in order to be observed and tested. They are ready to the validation checks. Prior to the testing process, the observation process was realized by observing the individuals (especially the women at every age and the couples) and their daily-routines. The depth of the observation process affected the endeavors of developing analyzing methods. During the analyses, "Fertility and Family Survey, 1997" data is used and statistical analyses are applied: the logistic regression, cross-tabs and chi-square tests and the decision tree method.

VIII. 1. b. Techniques of analysis

Cross tables and Chi-Square Tests

Cross-table referring to the process of combining and/or summarizing data from one or more sources for analysis are also used during the analysis of the variables. The cross tables which are used in this dissertation include the percentages furthermore they have three additional components: Observed values, expected values and standard residuals. The relationships (differences) reflecting from this triangle are supported by the chi-square tests which is also called "goodness-of-fit

test". It compares the observed and expected frequencies in each category to test either that all categories contain the same proportion of values or that each category contains a user-specified proportion of values (SSPS User Guide, 2002). On the other hand the standard residuals which are the part of the "kitchen" of the statistical operations provide to perceive a "tendency" explained with a number changing between -1,96 and 1,96. For example, if the observed number calculated for a given variable is higher than the expected number of the same variable, and the standard residual equals to -2.1, the difference refers to a strong but declining tendency.

Likelihood-Ratio Test

It uses the ratio of the maximized value of the likelihood function for the full model (L_1) over the maximized value of the likelihood function for the simpler model (L_0).

The likelihood-ratio test statistic equals:

$$-2\log\left(\frac{L_0}{L_1}\right) = -2[\log(L_0) - \log(L_1)] = -2(L_0 - L_1)$$

This log transformation of the likelihood functions yields a chi-squared statistic. This is the recommended test statistic to use when building a model through backward stepwise elimination (Alan, 1996 ; Hosmer and Lemeshow, 1989).

Logistic Regression

The researcher who wants to predict the presence or absence of a characteristic uses logistic regression. The operation includes a dependent variable which is dichotomous and a set of independent variables (predictors) to reach the result (prediction). The odds ratios estimated by the logistic regression coefficients provide

to predict the likelihood of realization of an event for each of the independent variables.

The model:

The dependent variable can take the value 1 with a probability of success θ, or the value 0 with probability of failure 1-θ. This type of variable is called a binary variable. Applications of logistic regression have also been extended to cases where the dependent variable is of more than two cases, known as multinomial (Hosmer, and Lemeshow, 1989).

The independent or predictor variables in logistic regression can take any form. In other words, logistic regression makes no assumption about the distribution of the independent variables. They don't have to be normally distributed, linearly related or of equal variance within each group. The relationship between the predictor and response variables is not a linear function in logistic regression; instead, the logistic regression function is used, which is the logit transformation of θ:

$$\theta = \frac{e^{(\alpha+\beta_1 x_1+\beta_2 x_2+\ldots+\beta_i x_i)}}{1+e^{(\alpha+\beta_1 x_1+\beta_2 x_2+\ldots+\beta_i x_i)}}$$

Where α = the constant of the equation,

β = the coefficient of the predictor variables.

An alternative form of the logistic regression equation is:

$$\text{logit}[\theta(x)] = \log\left[\frac{\theta(x)}{1-\theta(x)}\right] = \alpha + \beta_1 x_1 + \beta_2 x_2 + \ldots + \beta_i x_i$$

The goal of logistic regression is to correctly predict the category of outcome for individual cases using the most parsimonious model. To accomplish this goal, a

model is created that includes all predictor variables that are useful in predicting the response variable. Several different options are available during model creation. Variables can be entered into the model in the order specified by the researcher or logistic regression can test the fit of the model after each coefficient is added or deleted, called stepwise regression (Hosmer and Lemeshow, 1989).

Stepwise logistic regression is used in the exploratory phase of research but it is not recommended for theory testing (Scott, 1995). Theory testing is the testing of a-priori theories or hypotheses of the relationships between variables. Exploratory testing makes no a-priori assumptions regarding the relationships between the variables, thus the goal is to discover relationships.

There are two stepwise methods: Forward stepwise and backward stepwise. For both methods, the score statistic is used to select variables for entry into the model. Backward stepwise regression, which is one of the analysis methods of this study, appears to be the preferred method of exploratory analyses, where the analysis begins with a full or saturated model and variables are eliminated from the model in an iterative process. The fit of the model is tested after the elimination of each variable to ensure that the model still adequately fits the data. When no more variables can be eliminated from the model, the analysis has been completed (Hosmer and Lemeshow: 1989)

The Decision Tree (Classification Tree)

The “decision tree” which is a diagram consisting of nodes and branches that depicts the information for a decision problem is a predictive model based on a branching series of tests. Each test examines the value of a single column in the data and uses it to determine the next test to apply. The results of all tests determine which label to predict. In decision theory (for example risk management), a decision tree is a graph of decisions and their possible consequences, used to create a plan to reach a goal. Decision trees are constructed in order to help with making decisions.

It looks like a tree and produces predictions. During prediction it contains a set of rules and the body of the tree improves thanks to these rules. The body consists of the nodes (decisions) and the improvement is stopped by the leaves that have the lowest improvement levels. Thus, the statistical classification of the variables is realized. Decision tree method is more advantageous than the regression methods because it determines non-linear relationships. Moreover, the interpretation of the results is easier; primarily it is quite easy to delineate the statistical relations among the inputs in the model. (Rud, 2000 cited in Babadağ, 2003).

Figure VIII.1.b.1. Structure of a decision tree

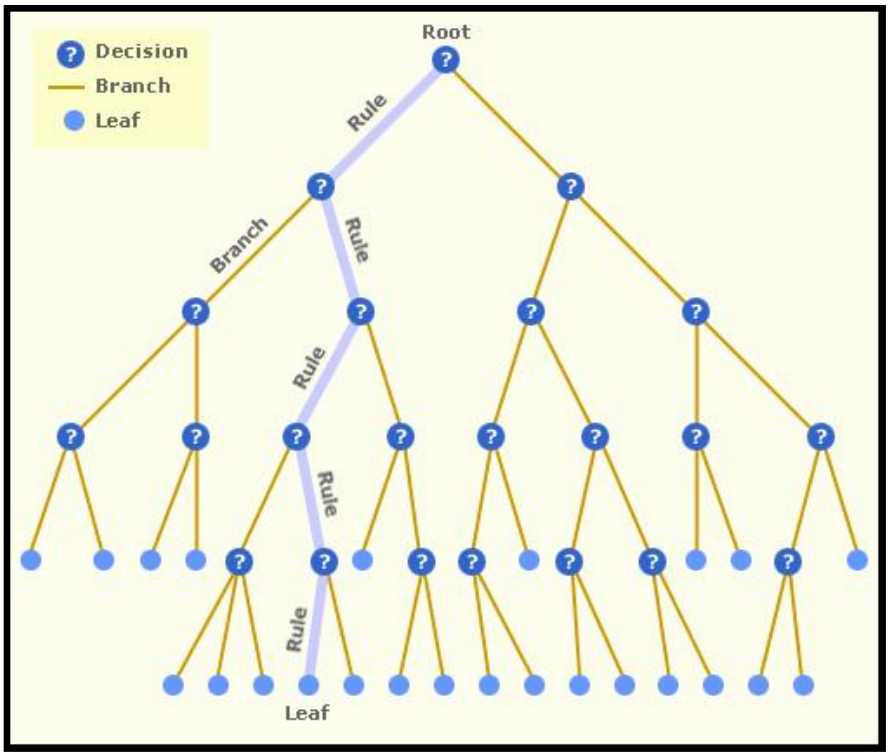
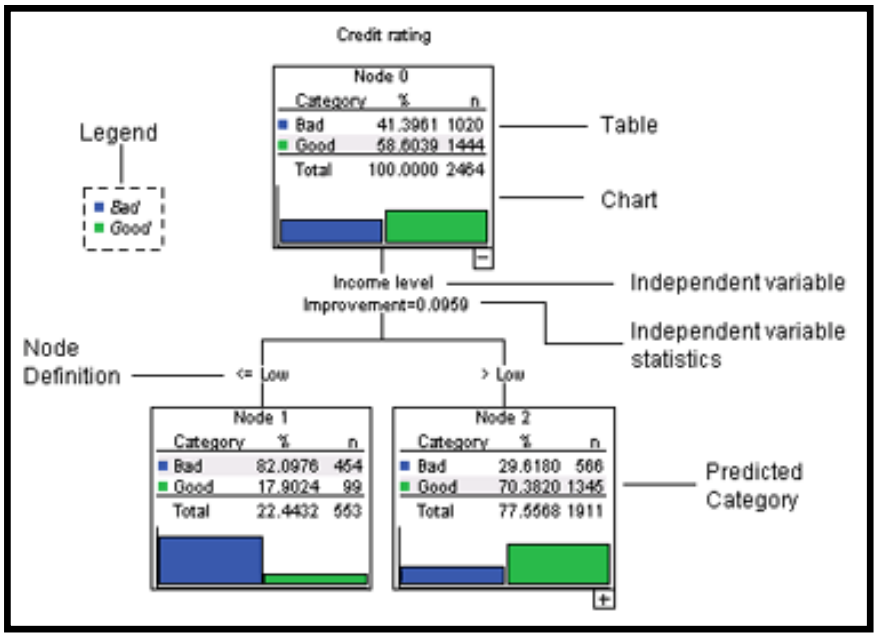


Figure VIII.1.b.1 illustrates simply "body of a decision tree" including the rules, branches and nodes (decisions). Each branch produces nodes (decisions), the nodes are tied up other nodes thanks to the new branches and finally, the improvement of the tree ends with the leaves. Each node symbolized with the question marks refers to the variables that have contributions to the model. By

following the “rules” from the root node to the leaves, the model-maker can easily make a decision about the situation of the dependent variable (Babadağ: 2003).

As for Figure VIII.1.b.2, it presents an example of the decision tree. The primary node including the dependent variable’s appearance according to two identical parts (options) is divided into two branches by an independent variable which affects it. Thus, the tree starts to improve and after the classification (model) is completed, the decision points are ready for producing the scientific estimates.

Figure VIII.1.b.2 Example of decision tree



Types of Decision Tree

There are three types of decision tree. Kass (1980) developed CHAID (Chi-Squared Automatic Interaction Detector) to classify a categorical dependent variable based on a number of predictors. Mitchell (2005) suggests that *CHAID uses chi-square statistics to split nodes and can split a single node into more than two child nodes* .However, researchers want to extent this method to use it for also continuous variables. Now, the target variable can be nominal, ordinal, or continuous. C&RT (Classification and Regression Trees) is another decision tree method which is non-

parametric method *based on minimization of impurity measures* (Brieman, 1984). The target variable can be nominal, ordinal, or continuous (SPSS Inc, 1998).

In 1997, QUEST (Quick Unbiased, Efficient Statistical Tree) was developed which used only categorical variables. The target variable must be nominal. It is considered that this method is computationally faster than C&RT but according to the empirical researchers, this is usually not true. C&RT is a flexible and it can be easily applicable but this is also based on user's ability to specify different input parameters to control the growth of the tree. (SPSS Inc., 1998; SPSS Inc., 2001).

C&RT and QUEST consist of binary trees: ever split have exactly two child nodes. But CHAID (and Exhaustive CHAID that used for examining all possible splits but takes longer to compute) generates non-binary trees (SPSS Inc., 1998; Mitchell 2005). This dissertation prefers C&RT because it wants to scrutinize the relationship between the characteristics of women (predictors) and intention to have child(ren) (dependent variables). At the same time, C&RT presents the opportunity to interpret relationships in details and promotes the results of the stepwise logistic regression.

In brief, the logistic regression method is used to predict a dependent variable on the basis of continuous and/or categorical independents and determines the percent of variance in the dependent variable explained by the independents; to rank the relative importance of independents; to assess interaction effects; and to understand the impact of covariate control variables. In this dissertation, it is used for understanding the effects of some selected variables on intentions to have a first and the second children. Logistic regression is similar to the linear regression. The difference is that the dependent variable is discrete and dichotomous (Yes / No or 1 / 2) The stepwise logistic regression (Backward: Likelihood Ratio) are employed in this study. However, because of the low case numbers, application of this method is strengthened by the decision tree - C&RT method by keeping in mind the notice of Brieman and his friends:

> *"C&RT diagrams should be thought of as a "tree trunk" with progressive splits into smaller and smaller "branches." The initial "tree trunk" is all of the participants in the study. A series of "predictor" variables are assessed to see if splitting the sample based on these predictors leads to better discrimination in the dependent measure" (Brieman et all. 1984).*

It is expected that application of these two methods together within the thesis supply to find out the identical statements obtained from the consequences of two methods. However, the dissertation does not compare them and contain any interpretation. It only gives important clues about the similar consequences.

VIII. 1. c. Reclassification of the variables

The variables included by the data of FFS-Bulgaria, which was carried out on females only (aged 18 to 45), are revised and some of the variables needed for the analyses are reclassified for this study. Particularly, the variables which have low numbers of observation are changed into the variables which have enlarged options in order to interpret the social and demographic relations appeared after the statistical analyses better. For instance, the variables related with the educational level of the respondents become one of the problematical matters of this study. Number of the women who are graduated from the elementary and primary schools is too low and that situation hinders to obtain healthier results. The options referring to the educational stages were connected in order to obtain more significant consequences and facilitate the interpretation.

Table VIII.1.c.1. includes the reclassifications and explanations on the groupings in this study.

Table VIII.1.c.1. Reclassification of the variables and explanations

	Reclassifications:	**Explanations:**
Birth Cohorts	1978-1979, 1973-1977, 1968-1972, 1963-1967, 1958-1962, 1953-1957 and 1952	Seven-category birth cohorts: This grouping is done to see the details of alteration of the dependent variables. This grouping is also used in FSS Country Report, Bulgaria.
	1960, 1961-1970, 1971-1980	Three-category birth cohorts: It is used for understanding the changes in the demographic events according to the broadened cohort groups.
Education	Elementary/Primary/Secondary/Higher	The original question has six options but due to very low number of observations, it does not provide reliable results. Therefore, it was rearranged and used as a variable that has four or three options.
	Elementary+Primary/Secondary/Higher	Due to very low number of observations and to increase reliability of the multivariate analyses, it was grouped as three categories.
Marital Status	Single/Married/Widowed/Divorced/ Separated	Originally the FFS data includes five options.
	Single/Married/Previously married	The FFS data does not include any information about remarriages. According to the country report, the history of non - marital cohabitation and marriage was dropped because of the low level of non-marital cohabitation and the low number of re-marriages. The report uses the variable of "previously married" covering widowed, divorced and separated women.

Table VIII.1.c.1. Reclassification of the variables and explanations (cont.)

	Reclassifications:	**Explanations:**
Place of residence	Rural, Urban (A)	<2000 inhabitants(village)=1 2,000 to 9,999=2 10,000 to 99,999=3 100,000 to 999,999=4 >1,000,000 (capital city)=5 (A)=Rural(1), Urban(2+3+4+5) (B)= Rural(1), Urban(2+3+4)/Sofia(5) In Bulgaria, Sofia is the only city that has population above 1,000,000.
	Rural, Urban, Sofia (B)	
Religiousness of the respondent	Yes No	The data includes two more options: "Somewhat" and "Don't know". The former was connected with the respondents who say "yes" to separate the "unbelievers" completely from the "believers" and the latter was ignored because it does not include any response.
Ethnic Status	Bulgarian/Turks/Gypsy	There are four options describing women's ethnic identifications but the fourth is "other" and, it is ignored.
Status of employment	Employee, Other employment status	The variable consists of six separate options (with "other"), but the respondents are mostly employee. So, the other occupational categories were connected and classified as "Other". The original "other" option was ignored.

Table VIII.1.c.1. Reclassification of the variables and explanations (cont.)

	Reclassifications:	**Explanations:**
Live Births	0,1,2,3,4,5,6+ 1-2, 3-4, 5+ 0, 1, 2, 3+	The responses to "How many children have you born together?" give information about "number of live births" and it was classified into three different groups.
Household size	One, two, three, four, six or more 1-2, 3-4, 5+	Originally, the variable, "household size", includes the households whose members are between one and eight. But it was recoded and used as two categories.
Ever used contraception	Yes, No	Same
First method a **First method b**	**Modern methods** Sterilized self, pill, intra-uterine device, injections, diaphragm-foam,etc., condom	The responses were grouped as three categories: modern, traditional and any other methods.
	Traditional methods Periodic abstinence, withdrawal	
	Any other methods	
Current use	Yes, No	Same
Current method a **Current method b**	**Modern methods** Sterilized self, pill, intra-uterine device, injections, diaphragm-foam, etc., condom	The responses were grouped as three categories: modern, traditional and any other methods.
	Traditional methods Periodic abstinence, withdrawal	
	Any other methods	

Table VIII.1.c.1. Reclassification of the variables and explanations (cont.)

Ever had a job 3+ months **(Working Status)**	Yes, No	The responses to the question were recoded as "working" and "not working".
Children wish partner	Same, More, Fewer, Don't know	The variable was evaluated as three categories: "Same", "More" and "Fewer". "Don't know" was ignored during the analyses.
Separated or divorced parent	Yes, No, Don't know	The variable was evaluated as two categories: "Yes", "No". "Don't know" was ignored during the analyses.
Intention to have first child **Intention to have a second child** **Intention to have a third child** **Intention to have a(nother) child**	q602 is asked only to respondents who have no children. It refers to intentions to ever have at least one child or never have any children. q603 is asked to those respondents who have answered "yes" to q602 about the number of children they would like to have. q602 was used to study the intentions to have a child for those who have not children. q605 asks about intentions whether they want to have at least one or more children to respondents who have already one or more living children (q606 is analogous to 603). In order to use q605, the number of children the respondent has should be known. For instance, q302 is checked to find out the number of children born subsequently. It is checked whether the child is alive or not (if the filter 601 branches to 605, the child is alive) and only then it is possible to know the intention of the respondent about having a(nother) child (q302→q601→q605).	

VIII. 1.d. Assumptions and hypotheses

The traditional institutions and social values in the societies, which have exposed to the effects of western values, unavoidably change and such a societal change results in the changes in traditional behaviors and attitudes. The changes in the practices of marriage and divorce are one of them and in general, lifelong living with somebody is more difficult but splitting up somebody easier than ever. For the reason that social, economic and cultural dimensions of the process of change which have western characteristics are always pregnant with a new understanding of freedom and new individual expectations. Freedom of woman is the most critical one of the changing understandings of freedom in a society because of its crucial effects on the social development. If in a society number of the women who can freely decide about her own life (work, carrier, motherhood) increase, the women are accepted as the strong social actors who carry the society from a traditional structure to the modern platforms.

In Bulgaria, modern freedom of the women is always of great importance. However, especially after the transition, the strongest sides of the women come into view; the increasing potential of education and the struggle of keeping the country alive by working very much encourage the absolute necessity of postponing their decisions about marriage and motherhood. Therefore, their roles on the changing fertility and family dynamics in the country are unquestionable.

By resting on these explanations, during this study, seven assumptions are envisaged before the social and demographic issues in post-transition Bulgaria are discussed:

Ass.1) The traditional approach of women to marriage institution changes across age. Marital union is the most acceptable form of family formation for the older cohorts. If the issue is considered in terms of the birth cohorts (included by the data of FFS, Bulgaria 1997), among the women born in 1970s, proportion of ones who are inclined to live

in a non-marital cohabitation is more than the women born in the older years.

Ass.2) Increase in number of the non-marital cohabitations in the country is demographically significant but, it is early to accept that the idea of building a family becomes a fact of the past. For the reason that, number of non-marital cohabitation in a woman's life determines her decision about marriage and still there are lots of women who prefer to be a married women in the country.

Ass.3) Women's attitudes to marriage (thoughts and behaviors determining their intention to marriage) are differentiated by their ethnic identifications. It is expected that tendency to marriage is higher among the Turkish and Gypsy women than the Bulgarian women.

Ass.4) Women's attitudes to motherhood are directly related with their working status. The women who believe that she earns enough money to live on well have a stronger desire to have a(nother) child.

Ass.5) In post-transition Bulgaria, number of the children in a family is also differentiated by the ethnic identifications. It is expected that number of the children that the Turkish and Gypsy women have is more than that of Bulgarian women.

Ass.6) Educational level of a woman is inversely related with her decision about building a marital family union: While the educational level increases, probability of being in a non-marital cohabitation decreases because the well-educated women who live in a non-marital cohabitation most probably are transferred into marriage soon.

Ass.7) Birth of the first child is an important factor which takes the non-marital relationship to the first marriage. It is likely that the woman who has first pregnancy wants to get married with her partner before the delivery. However, the second and the following births are not supposed to become the determining factors for transition to first marriage.

And three hypotheses concerning fertility intentions are tested:

H1. The fertility intentions are differentiated by the given eight basic characteristics of the women: Birth cohorts, current marital status, types of place of residence, employment status, religiousness, household size, ethnic status and level of education.

H2. The fertility intentions are discriminated by the given four basic characteristics of the partners: Level of education, partner's children wish, employment status and religiousness of the partner.

H3. The fertility intentions are determined by the women's opinion about the parental responsibilities and partnership.

CHAPTER IX. FINDINGS

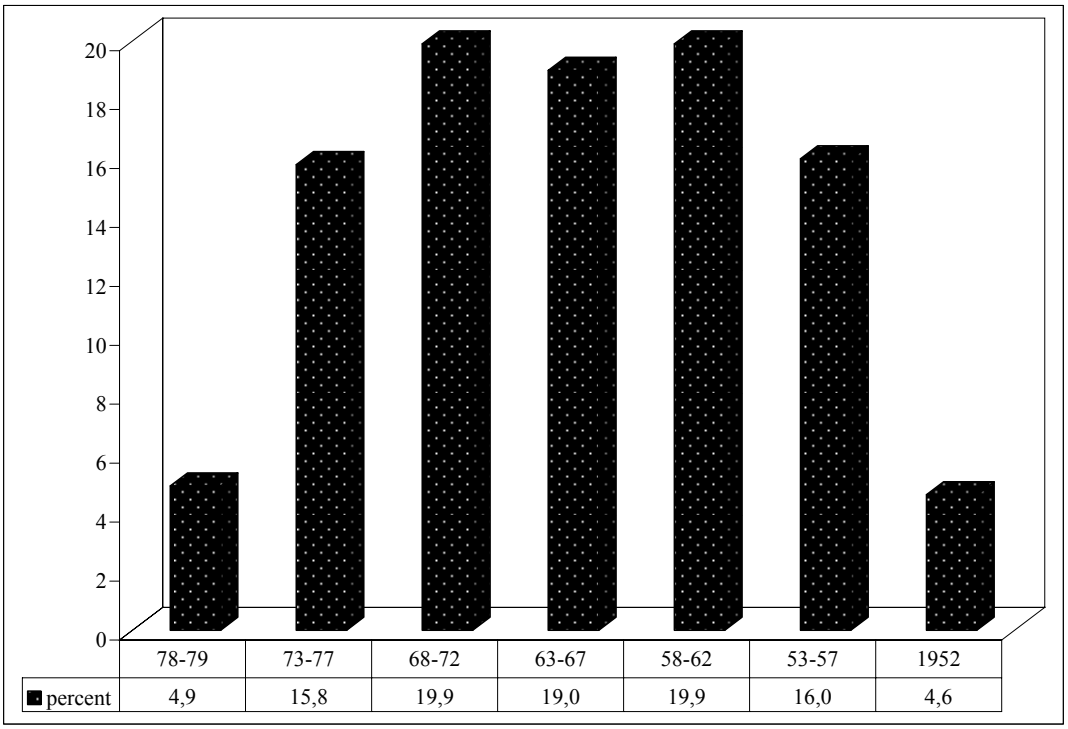
IX.I. BACKGROUND CHARACTERISTICS OF THE RESPONDENTS IN COVERAGE OF THE DATA OF FFS-BULGARIA, 1997

IX. 1. BASIC CHARACTERISTICS

IX. 1. a. Birth Cohorts

Fertility and Family Survey carried out in 1997 contains information for 2367 respondents born between 1952 and 1979. Figure IX.1.a.1 points out the distribution of the birth cohorts separated into seven groups.

Figure IX.1.a.1. Proportions of 1952-1979 birth cohorts, FFS-Bulgaria, 1997



Cohort composition of the survey reflects proportional distributions of the respondents in their reproductive ages (18-45). Figure IX.1.a.1 indicates that the respondents born in 1978-1979, who are at the beginning of their reproductive age, account for exactly 4.9 percent of the sample. Furthermore, percentage of the respondents at the end of their fertile ages is also an approximate value; exactly 4.6.

IX. 1. b. Household Size

Definition of "household" used by FFS-Bulgaria is not different from the standard definitions used by other FFS countries:

> *"A household is a group of persons who reside together and share a common budget"* (Philipov, 2001).

The FFS country report warns that the traditional household stimulating early marriage and high fertility became a thing of the past, but, even if there are many extended households in the sample-though there are- these may not be completely assumed as the traditional relics of the past: FFS does not directly supply information about the households keeping traditional values. The results derived from the revised data can be accepted as one of the consequences of housing crisis in Bulgaria. However it should not be expected that they would reflect the traditional norms and values of the people living in post-transition Bulgaria about household size (Philipov, 2001).

The country report also suggests that this survey does not reflect the reliable values with respect to the size and composition (Philipov, 2001). In post-transition Bulgaria, as one of the results of the transition; the struggle to make a living and housing crisis because of the strong market in the country, have brought about lots of "boarding houses" (shared houses). The sample does not include boarding houses. For example, many women in their reproductive ages who work and/or receive education in the cities settle in a collective house and lived with its old owner. On the other hand, it is a social reality that the women in their reproductive ages have lived in the large households for years. Especially since 1990, young families have unavoidably begun to live together with their parents because of the dwelling expenses.

In the sample of the survey, the household size in which women live is not very approximate to the average for the total population; it is 3.9 and higher than the average; 2.7 declared by the last census in 1992. According to the World Bank

(2006) statistics the conjectural average household size is 2.8 in 1997. The household size in which women live is higher than also the average of 1997. Therefore, while the respondent's characteristics are evaluated according to the household size and composition, it should be remembered that the sample does not provide absolutely reliable outcomes with respect to these aspects.

Table IX.1.b.1. Percentage distribution of the birth cohorts by household size, FFS-Bulgaria, 1997

	78-79	73-77	68-72	63-67	58-62	53-57	52	Total
Household size								
1	1.9	0.8	2.0	2.5	2.0	3.5	4.8	2.2
2	6.6	10.4	10.2	8.6	7.8	10.8	13.1	9.5
3	25.5	34.0	30.7	24.3	21.5	19.5	22.6	25.8
4	37.7	29.6	30.4	38.6	45.0	41.7	35.7	37.2
5	21.7	15.1	14.6	15.7	15.2	16.5	9.5	15.5
6+	6.6	10.1	12.2	10.2	8.5	7.9	14.3	9.9
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
N	**106**	**365**	**460**	**440**	**460**	**369**	**84**	**2284**

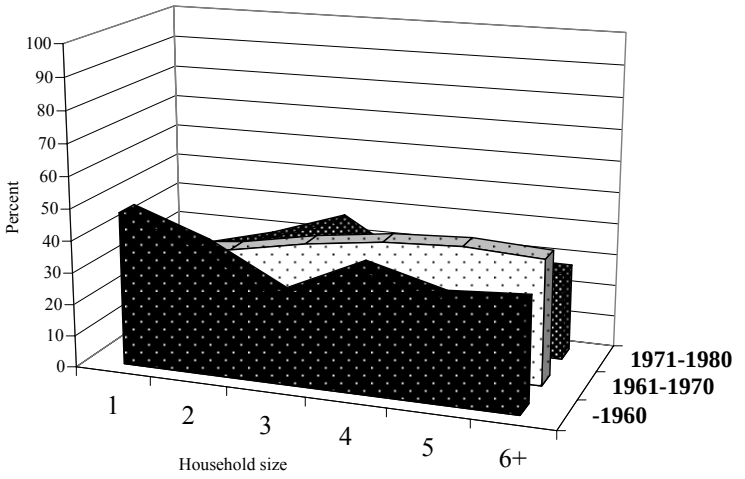
Data Source: FFS survey data (Philipov, 2001)

According to the country report birth years beyond the required ones were also included into the data set and analyses were performed with the inclusion of them in order to have increased number of cases. However, for this study, the birth cohorts are assembled into seven groups and the birth cohorts are definitely restricted to years between 1952 and 1979. In other words, years beyond 1952 and 1979 are not included. As expected, the distribution of the birth cohorts also does not provide reliable figures due to the effects the inaccurate records on the household size.

Table IX.1.b.1 shows the percentage distributions of the women's birth cohorts by the household size. In general, the figures in the table put forth the womens' desire of living in larger household for consideration. With regard to the household size; about 26 percent of the women born in 1978-1979 live in the households with three members, 38 percent live in the households with four members and about 22

percent live in the households with five members. 34 percent of the women born in 1973-1977 live in the households with three members. Similarly, about 30 percent born in the same period live in the households with four members. The percentages of the women born in 1968-1972 are very close to the other young cohorts; around 30 percent of them also live in the households with three or four members. So, generally the women who are in their reproductive ages share their houses with someone.

Figure IX.1.b.1. Household size by three-category birth cohorts, FFS-Bulgaria, 1997



	1	2	3	4	5	6+
-1960	48,1	39,6	27,0	38,1	31,6	33,2
1961-1970	29,6	32,0	36,4	39,5	40,7	39,3
1971-1980	22,2	28,4	36,6	22,3	27,7	27,5

Figure IX.1.b.1 also rests on the relationship between the birth cohorts and household size. It is constituted so as to show the mentioned distribution by using larger cohort groups (three-category cohorts) and achieves a more noticeable appearance. According to Figure IX.1.b.1, among women living alone, percentage of the women born in 1960 and before is about 48 percent, in other words, it exceeds twice the percentage of the women born in 1970s and living alone (22 percent). The biggest group of the sample consists of the women born in 1960s (N=875, Total N=2307). The households with four or more members generally include the women

born in 1961-1970 whereas the households with one or two members consist of the older women.

In order to provide clarification to the situation of household size in post-transition Bulgaria, it is possible to examine details of the issue by using descriptive approaches. The variables, “residence”, “ethnic status” and “religiousness of the respondents”, which are the important determining factors of the household size, are used for the “descriptive commentary” of the subject.

Industrialization and technological developments in the agricultural sector stimulated sudden urbanization in 1960s and population in rural areas rapidly dissolved in 1960s and immigration to the largest cities continued until the end of 1980s. From the second part of 1980s to the post-transition years, about 20 percent of the subsequent-inhabitants in the urban areas changed their usual residence again. Some of them returned to their previous types of place of residences due to the political restrictions (changes in address registration) and some of them could not cope with the course of the economic events and hard living conditions in the larger cities (UNDP, 2000; Philipov, 2001; Vezenkov, 2001). In other words, the political and economic fluctuations going on for a long time considerably change the territorial order in the country, and consequently, persons’ preferences regarding the type of place of residence.

Table IX.1.b.2. Descriptive commentary of the relation between household size and residence, FFS-Bulgaria, 1997

	Household size						
Residence	**1**	**2**	**3**	**4**	**5**	**6+**	**N**
Rural							
Number	15	52	122	216	126	132	663
Expected number	16	64	170	244	101	68	663
% within residence	2.3	7.8	18.4	32.6	19.0	19.9	100
Standardized residual[25]	-0.2	-1.5	-3.7	-1.8	2.4	7.8	
Urban							
Number	33	138	391	554	202	92	1410
Expected number	33	137	361	519	216	145	1410
% within residence	2.3	9.8	27.7	39.3	14.3	6.5	100
Standardized residual	-0.1	0.1	1.6	1.6	-0.9	-4.4	
Sofia							
Number	7	35	82	84	27	14	249
Expected number	6	24	64	92	38	26	249
% within residence	2.8	14.1	32.9	33.7	10.8	5.6	100
Standardized residual	0.5	2.2	2.3	-0.8	-1.8	-2.3	
Total							
Number	55	225	595	854	355	238	2322
Percent of total	2.4	9.7	25.6	36.8	15.3	10.2	100
Chi-square tests -Household size-residence							
	Value	**df**	**Sig. (2-sided)**				
Pearson Chi-Square	129.5	10	0.000				
Likelihood Ratio	120.8	10	0.000				
N	2322						

Correlation is significant at 0,05 level.

Frequency of the "types of place of residence" is a sign of the recent territorial order in the end of 1990s. It should be remembered that the variable of "locality of

[25] Residuals are differences between the observed values and the corresponding values that are predicted by the model and thus they represent the variance that is not explained by the model. The better the fit of the model, the smaller the values of residuals. The ith residual (e_i) is equal to: $e_i = (y_i - y_i\text{-hat})$

where
y_i is the observed value
y_i-hat is the corresponding predicted value

Standard residuals are the significant values when they are between -1,96 and 1,96.

current residence" was rearranged for this study and covers three categories: Urban, rural and Sofia. During the analysis, Sofia is treated as a separate category because it is the only province which has population more than 1.000.000 in Bulgaria. It accounts for about 11 percent of the survey population.

Table IX.1.b.2 suggests that household size is affected by the residential differences and it can change according to the type of residence ($p<0,05$). While in the rural areas household size with one or two members does not show remarkable figures, the expected number of the households with three members is more than the observed; the potential to decrease is remarkable ($St.Rr_3$=-3.7). Similarly, the expected numbers of the extended households with five or more members are also more than the observed numbers and they have a potential to increase ($St.Rr_5$= 2.4 and St Rr_{6+}=7.8). In the urban areas, for the households with one member or with two members, the differences between observed and expected numbers are not remarkable. At the same time, standard residuals belonging to these two kinds of households do not point out a significant tendency. Difference between the observed and the expected number of the households with three or four members is close to the significance level (1.96) and but for now, it is less possible to see their number increased in the near future. In Sofia, the capital city (Population>1.000.000), there is not a remarkable change in the number of households with one member while the number of household with two and three members are more than the expected; and, these kinds of households have potential to increase ($StRS_2$= 2.2 and $StRS_3$=2.3). The expected numbers of the extended households which have four or more members are quite higher than the observed ones so, it can be said that their numbers decrease in the cities and it is not expected an increase in the near future.

Table IX.1.b.3. Descriptive commentary of the relation between household size and ethnic status of the respondents, FFS-Bulgaria, 1997

	Household size						
Ethnic status	**1**	**2**	**3**	**4**	**5**	**6+**	**N**
Bulgarian							
Number	54	214	567	779	297	160	2071
Expected number	49	199	533	761	320	209	2071
Percentage	2.6	10.3	27.4	37.6	14.3	7.7	100
Standardized residual	0.8	1.0	1.5	0.6	-1.3	-3.4	
Turk							
Number	1	3	26	57	47	55	189
Expected number	4	18	49	69	29	19	189
Percentage	0.5	1.6	13.8	30.2	24.9	29.1	100
Standardized residual	-1.6	-3.6	-3.2	-1.5	3.3	8.2	
Gypsy							
Number	0	8	8	23	17	21	77
Expected number	2	7	20	28	12	8	77
Percentage	0.0	10.4	10.4	29.9	22.1	27.3	100
Standardized residual	-1.3	0.2	-2.7	-1.0	1.5	4.7	
Total							
Number	55	225	601	859	361	236	2337
Percent of total	2.4	9.6	25.7	36.8	15.4	10.1	100
Chi-square tests 2-Household size-ethnic status							
	Value	**df**	**Sig. (2-sided)**				
Pearson Chi-Square	158.6	10	0.000				
Likelihood Ratio	141.8	10	0.000				
N of Valid Cases	2337						

Correlation is significant at 0,05 level.

One of the factors determining household size is the "ethnic status" of the respondents. Ethnically, the sample comprises three main groups: Bulgarians, Turks and Gypsies. Table IX.1.b.3 examines that the relationship between household size and ethnic status of the respondents. Its main approach is that the household size is significantly differentiated by the ethnic identifications of the women ($P<0,05$). About 89 percent of the respondents are Bulgarian. Thus, the case numbers of the Turks and Gypsies is quite low. However, it is possible to see that the Bulgarian households having three and four members probably have a rising trend, particularly,

it should be mentioned that the Bulgarian households with three members have a potential to increase ($St.RB_3$=1.5) because the observed numbers of both are higher than the expected. On the contrary, difference between the observed number and the expected number of the households with five or more members seems remarkably less than the others. General tendency is in favor of a steadily decline in number of the crowded households in particular, in number of the households with "six or more" members ($St.RB_{h5}$: -1.3 and $St.RB_{h6+}$:-3.4). The traditionally extended Turkish households and both traditionally and economically extended Gypsy households have the tendency to increase which is the opposite of the Bulgarian households. Number of the Turkish households having members between one and three is lower than the expected number while the number of the households having five or "six or more" member points a difference referring a remarkable increase ($St.RT_{h5}$: 3.3 and $St.RT_{h6+}$: 8.2). On the other hand, for the Gypsy households, the visible trend is similar to that of the Turkish households. They have potentially crowded households. However, the very low case number of the Gypsies should be taken into consideration. At that point, it might be expected that the crowded Gypsy households have higher proportions than the other ethnic groups, but, the case number is not enough to obtain more tangible results and articulate any opinion on them.

The interrogation of the religiousness in the country presents a scene which is similar with the ethnic one.

> *"The Bulgarians are Eastern Orthodox Christians and the Turks are Muslims (with the domination of Sunnites). Close to 200.000 Bulgarians are also Muslims. The Roma/Gypsies are divided between the two religions"(Philipov, 2001)*

However, it should be remembered that about 48 percent of the population are the unbelievers, but the FFS data can not provide any information on them.

Table IX.1.b. 4. Descriptive commentary of the relation between household size and religiousness of the respondents, FFS-Bulgaria, 1997

	Household size						
Religiousness	**1**	**2**	**3**	**4**	**5**	**6+**	**Total**
Religious							
Number	45	163	429	546	232	166	1581
Expected number	37	150	405	582	245	162	1581
Percentage	2.8	10.3	27.1	34.5	14.7	10.5	100
Standardized residual	1.3	1.1	1.2	-1.5	-0.9	0.3	
Not religious							
Number	9	57	165	308	128	71	738
Expected number	17	70	189	272	115	75	738
Percentage	1.2	7.7	22.4	41.7	17.3	9.6	100
Standardized residual	-2.0	-1.6	-1.7	2.2	1.3	-0.5	
Total							
Number	54	220	594	854	360	237	2319
Percent of total	2.3	9.5	25.6	36.8	15.5	10.2	100
Chi-square tests 3-Household size-religiousness							
	Value	**df**	**Sig. (2-sided)**				
Pearson Chi-Square	23.5	5	0.000				
Likelihood Ratio	24.3	5	0.000				
N of Valid Cases	2319						

Correlation is significant at 0,05 level. Data Source: FFS Survey Data (Philipov, 2001)

Table IX.1.b.4 examines the relationship between household size and religiousness. The household size undergoes a change according to the religiousness of women ($p<0,05$). The religious households mostly have three or four members; the observed numbers are higher than the expected numbers for three members, however; particularly for the ones which have four members, it may be said that they have not the potential to increase ($StR_4=-1.5$) like the ones which have five members (StR5=-0.9).

Figure. IX.1.f.b.2. Religion of the respondent by household size, FFS Bulgaria, 1997

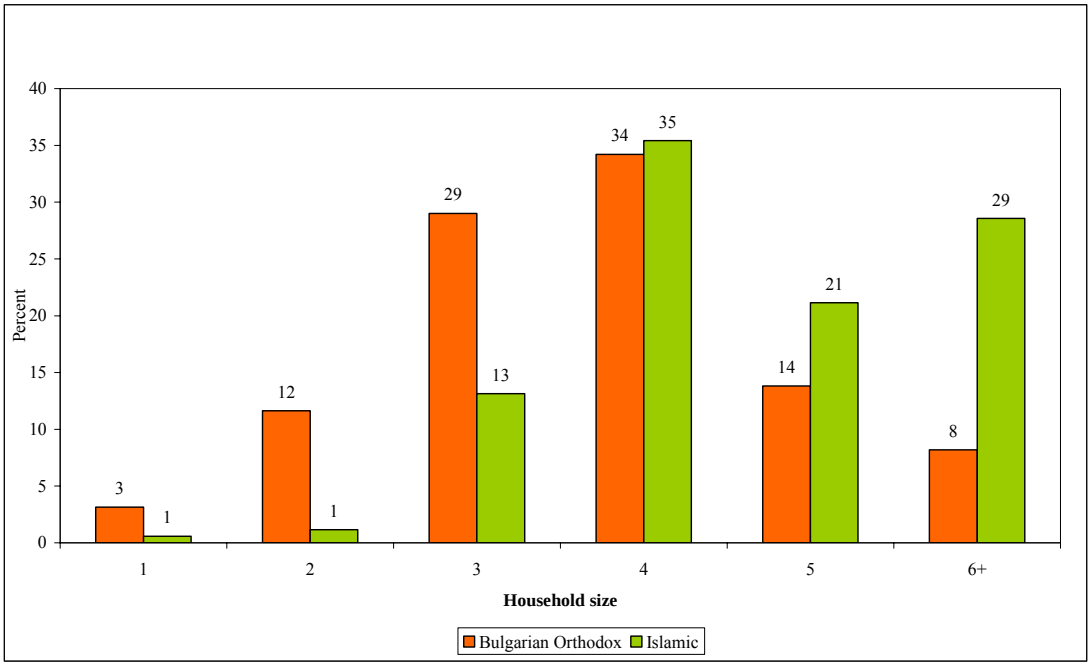


Figure IX.1.f.b.2 compares two groups of religion by household size. Percentage of the Muslim women who live in the households with one member is just 1 percent whereas the percentage of Bulgarian Orthodox women who live in the households with one member is 3 percent. Twenty-nine percent of the Bulgarian Orthodox women and 13 percent of the Muslim women live in the households with three members. As for the Muslim women who live in the households with four more members, their proportion is higher than the proportion of Bulgarian Orthodox women who live in the households with four or more members but not too much (35 percent and 34 percent respectively). However, percentage of the Muslim women living in the households with five or more members is quite higher than the Bulgarian women living in these kinds of households.

IX. 1. c. Respondents' Basic Characteristics

Table IX.1.c.1. Percentage distribution of the respondents' marital status, residence, education and ethnic status by birth cohorts FFS-Bulgaria, 1997

	Birth cohorts								
	78-79	**73-77**	**68-72**	**63-67**	**58-62**	**53-57**	**52**	**Total**	**N**
Marital status									
single	21.8	42.9	16.9	8.3	4.5	4.5	1.1	100	445
married	0.5	9.8	21.6	22.3	23.2	18.3	4.3	100	1623
previously married	0.6	6.5	14.1	18.2	30.6	25.9	4.1	100	170
Residence									
rural	5.7	17.1	18.3	18.3	19.9	15.8	4.8	100	627
urban	4.5	15.4	21.0	19.2	20.4	16.3	3.1	100	1370
Sofia	3.2	17.3	19.0	19.8	19.4	16.9	4.4	100	248
Education									
elementary school	3.6	28.6	23.2	12.5	14.3	10.7	7.1	100	56
primary school	10.1	11.3	17.7	18.1	21.4	15.3	6.0	100	248
secondary school	5.8	19.8	20.4	16.6	19.3	15.1	3.1	100	1341
higher	0.2	8.5	20.4	26.1	21.8	19.3	3.8	100	633
Ethnic status									
bulgarian	4.7	16.1	19.4	18.8	20.7	16.7	3.6	100	1992
turk	3.8	13.0	27.0	23.8	16.8	11.4	4.3	100	185
gypsy	6.5	20.8	22.1	18.2	15.6	13.0	3.9	100	77
Total	**4.6**	**16.0**	**20.1**	**19.3**	**20.1**	**16.2**	**3.7**	**100**	**2367**

It should be remembered that, before the data analysis, the variable of "marital status" was revised and then the "separated", "divorced" and "widowed" women were categorized together (the data do not include any information about remarriages) and named as "previously married" because of their fewer numbers in the data. Table IX.1.c.1 points that about 43 percent of the single women were born between 1973 and 1977 and 22 percent in 1978-1979. According to the table most of the married women were born between 1958 and 1972, in other words, they are generally between 25 and 39 at the time of the survey. About 31 percent of the

previously married women were born in 1958-1962 and around 26 percent were born in 1953-1957.

In general, when the "urban" and the "Sofia" are thought together, proportion of the respondents living in urban areas is around 72 percent. Because the women in their reproductive ages are a considerable part of the economically active population, they mostly live in the cities. Eleven percent of the women live in Sofia and the percentages of the respondents living in Sofia and in the other urban areas are very close to each other.

The FFS-Bulgaria, 1997 does not provide enough information on the education of women. Even though education at middle-level was made obligatory and higher education was not obligatory, at the time of interview, the observed number of educated women does not provide the expected results. The higher education became free immediately after the transition and many women applied to higher schools to gain profession. According to Table IX.1.c.1, it can be said that educational level of the respondents is differentiated by the birth cohorts. Especially, higher educational level of the respondents has shown an increasing trend with age: When the higher education of women aged below 30 is taken into consideration; 20 percent of those who have higher education are the women born in 1968-1972, while 26 percent of those who have higher education were born in 1963-1967.

> *"The difference can not be explained by censored observations only. Indeed, if this were the case then substantial groups from the lower levels of education would have to move forward, and this can hardly happen. It is more likely that over recent years, i.e. 1990s, there was a lower tendency to seek higher education among women in Bulgaria" (Philipov, 2001)*

As shown in the Table IX.I.c.1., approximately 21 percent of the Bulgarian women were born between 1958 and 1962; around 19 percent were born in 1968-1972. Twenty-seven percent of Turks were born in 1968-1972 and about 24 percent

of Turks were born in 1963-1967. Proportion of the younger Gypsy women that were born in 1973-1977 is about 21 percent and 22 percent of the Gypsies were born in 1968-1972.

Table IX.1.c.2. Percentage distribution of educational level by birth cohorts and residence, FFS-Bulgaria, 1997

	Education					
	elementary	**primary**	**secondary**	**higher**	**Total**	**N**
Birth cohorts						
78-79	1.9	23.6	73.6	0.9	100	106
73-77	4.4	7.7	73.0	14.9	100	363
68-72	2.8	9.6	59.6	28.0	100	460
63-67	1.6	10.3	50.6	37.6	100	439
58-62	1.7	11.6	56.6	30.1	100	458
53-57	1.6	10.3	54.9	33.2	100	368
52	4.8	17.9	48.8	28.6	100	84
Residence						
rural	4.2	21.3	65.5	9.0	100	663
urban	1.7	8.0	58.2	32.1	100	1405
Sofia	0.4	1.2	46.2	52.2	100	249
Total	**2.4**	**11.2**	**58.7**	**27.5**	**100**	**2367**

The educational level is overviewed by the Table IX.1.c.2 once more. About 59 percent of the women have graduated from the secondary school. About 28 percent have graduated from the higher schools and total percent of the graduates of the elementary and primary schools is 14 percent (2,4 percent and 11,2 percent respectively). In relation to the graduation of secondary school, the youngest cohort-groups, 1978-1979 and 1973-1977, are seen as the most educated groups whereas in relation to the graduation of higher schools, the situation is completely different: Older cohorts have higher education. So, it seems that most of the women have secondary and higher education, but a considerable number of them have low educational level should be taken into account. The FFS data is thought to be distorted in terms of educational level of Bulgarian women; because education has always been the primary issue of Bulgarian government, in particular during the communist rule. It should also be considered that unexpected increase in the number

of low educated women could have been aroused from some unobserved characteristics of the women at the time of the interview.

In the rural areas about 66 percent of the respondents have graduated from the secondary schools, however, as previously mentioned, the percentages of the graduates of secondary schools who live in the urban and also in Sofia are also high (58 percent and 46 percent respectively). In Sofia, 52 percent of the women living in Sofia have higher education. The women living in the rural areas have lower education than their counterparts living in the urban areas.

Table IX.1.c.3. Percentage distribution of the working status of women by birth cohorts, household size, marital status and residence, FFS-Bulgaria, 1997

	Working status			
	working	**not working**	**Total**	**N**
Birth cohorts				
78-79	18.8	81.3	100	96
73-77	30.5	69.5	100	325
68-72	53.9	46.1	100	436
63-67	65.3	34.7	100	424
58-62	76.5	23.5	100	452
53-57	76.0	24.0	100	359
52	73.4	26.6	100	79
Household size				
1	77.8	22.2	100	45
2	66.7	33.3	100	210
3	61.4	38.6	100	567
4	63.0	37.0	100	837
5	52.9	47.1	100	359
6+	46.7	53.3	100	229
Marital status				
single	44.7	55.3	100	425
married	62.3	37.7	100	1643
previously married	75.0	25.0	100	172
Residence				
rural	49.6	50.4	100	637
urban	63.7	36.3	100	1321
Sofia	67.8	32.2	100	245
Total	**59.9**	**40.1**	**100**	**2367**

In post-transition Bulgaria, the indicators that point out the women's working status are higher than the previous decade in spite of a sharp rise in unemployment after 1990s. "Working status of the respondents" covers the responses to the question of *"I am interested in periods of 3 consecutive months or longer of paid employment, own-account work in family business or producers' cooperatives, and so on. Do you*

have such a job at the moment?" (Philipov, 2001). Almost 60 percent of all the interviewed women were employed at the time of interview (N=1347).

Table IX.1.c.3 includes the percentage distribution of the working status by birth cohort, household size, marital status and residence. In accordance with the birth cohorts, 81 percent of respondents born in 1978-1979 and about 70 percent of the respondents born in 1973-1977 were not employed at the time of interview. The young women who had not a job at that time, most probably, were continuing their education. Part-time jobs giving students opportunity of working in a proper job is too rare in Bulgaria and, in accordance with the collected information, FFS-Bulgaria also does not include any practical information about the women doing these kinds of jobs.

The percentage of women who have a job is considerably high among the older women. Among the women living alone, 78 percent work whereas among the women living in the households with two members, about 67 percent work. Clearly, when the household size is extended, the percentage of the women who have not a job gradually increases.

Nearly all of the women who are married or previously married have a job (62 percent and 75 percent respectively). 55 percent of the single women have not worked yet. In other words, more than half of the single women do not work, most probably, due to their continuing education. So, it is inevitable to make a contact between the range of economic activities of the women and the high number of the separation or divorce in the country.

Indeed, proportions of the working women are not very satisfied even if their numbers have risen in the recent years. Approximately half of the women living in the rural areas do not work while almost 68 percent of the women living in Sofia have a job. However, the percentages of the women who don't work in the urban areas and Sofia are also remarkable; it is more than 30 percent in both types of place of residence.

Table IX.1.c.4. Among working women, percentage distribution of the employment status of the women by birth cohorts, residence and education, FFS-Bulgaria, 1997

	Employment status of women			
	employee	**other employment status**	**Total**	**N**
Birth cohorts				
78-79	100	_	100	106
73-77	92.9	7.1	100	365
68-72	89.9	10.1	100	460
63-67	88.4	11.6	100	440
58-62	89.4	10.6	100	460
53-57	93.3	6.7	100	369
52	91.5	8.5	100	84
Residence				
Rural	88.0	12.0	100	663
Urban	92.1	7.9	100	1410
Sofia	90.5	9.5	100	249
Education				
elementary	66.7	33.3	100	57
primary	79.5	20.5	100	264
secondary	92.6	7.4	100	1390
higher	90.4	9.6	100	650
Total	**90.9**	**9.1**	**100**	**2367**

All the members of the youngest groups are employee. Indeed, participation to labor force is widespread among the older cohorts (Table IX.1.c.4). Among the women living in rural areas, 88 percent are employee while among the women living in urban areas, proportion of the employee women is more than 90 percent. The percentage of the women who have higher education is around 90 percent. However, about 67 percent of the graduates of elementary schools and about 80 percent of the graduates of primary schools are also employee and, policy makers should not regard these figures as too little. Most probably these results are strongly related with the unsystematic economy and unequal conditions in the labor market. At the time of interview, about 91 percent of the working women were employee.

Table IX.1.c.5. Percentage distribution of marital status of the respondents by residence, educational level, working status and ethnic status, FFS-Bulgaria, 1997

	Marital status			
	single	**married**	**previously married**	**Total**
Education				
elementary school	2.0	2.4	3.4	2.4
primary school	7.8	12.1	11.4	11.2
secondary school	69.6	57.0	49.1	58.9
higher school	20.6	28.5	36.0	27.5
Total	100	100	100	100
N	461	1717	175	2353
Residence				
rural	28.9	29.1	23.8	28.7
urban	54.0	62.3	62.8	60.7
Sofia	17.1	8.6	13.4	10.7
Total	100	100	100	100
N	461	1681	172	2314
Working status				
working	44.7	62.3	75.0	59.9
not working	55.3	37.7	25.0	40.1
Total	100	100	100	100
N	425	1643	172	2240
Ethnic status				
Bulgarian	94.1	86.6	93.7	88.6
Turk	4.6	9.7	2.3	8.1
Gypsy	1.3	3.8	4.0	3.3
Total	100	100	100	100
N	457	1697	175	2329

According to Table IX.1.c.5, while there are about 70 percent single women who have graduated from the secondary schools, 57 percent of the married women and almost half of the previously married women have graduated from these schools. Among the previously married women, proportion of the graduates of higher schools is the highest (36 percent). About 29 percent of the married women have higher education. Proportion of the single women who have higher education is about 21 percent; most probably there are single women who are still continuing their education among them as well.

Regarding the types of place of residence, more than 60 percent married and previously married women live and 54 percent of the single women live in the urban areas. Proportion of the married women living in Sofia is the lowest among the others (about 9 percent). 17 percent of the single women reside in Sofia.

Seventy-five percent of the previously married women and almost 62 percent of married women have a job. It can be considered that the majority of the women, who have ever married before, have economic self-sufficiency. Fifty-five percent of the single women and about 38 percent of the married women do not work.

Around 94 percent of the previously married and single women and, 87 percent of the married women are Bulgarian. Among married women proportion of the Turkish women is about 10 percent. As for Gypsies, proportion of the married women is close to the proportion of previously married women (3.8 percent and 4.0 percent respectively).

Marriage has always been the traditionally accepted form of partnership in Bulgaria but in practical, it is not accepted as one of the rigid rules of the social life for building a family. In general, the single women at their younger ages want to have a child after a marriage ceremony. But, for the women who are previously married, it is not a necessity to live with a partner. Therefore, non-marital cohabitation can be accepted as a fact addressing to the later years of life.

According to FFS –Bulgaria, the partnerships are explained as follows:

> *"Marriage is by far the dominating form of partnership in Bulgaria. Over the recent decades, legalization of marriages has become common. The tradition of factual marriages, that were not administratively formed, is gone. Non-marital cohabitation can fit in with social norms in some cases, without being a rule of behavior. One such case is a short term (a few months) partnership that may precede marriage. It is much more common and nearly universal*

that love relationships outside non-marital cohabitation will precede entry into first marriage. Another case refers to later years of life when non-married people live together at older age. The latter has not been observed in the FFS. A third case is where partners may cohabit after at least one of them has previously divorced" (Philipov, 2001)

Figure IX.1.c.2. Percentage distribution of the respondents currently living in a non-marital cohabitation by birth cohorts, FFS-Bulgaria, 1997

The emergence of non-marital cohabitation as a social fact in Bulgaria was before 1960s and today cohabitation is very widespread especially among younger cohorts. However, the obtained results show low percentages and the reason of that situation is explained by the authors of the country report as a result of the prevalence of the traditional forms of family formation. Therefore, during the survey the questions regarding unmarried partnerships were kept to a minimum (Philipov, 2001). The proportions presented by Figure IX.1.c.2 are derived from mainly the question of *"Are you currently living in the same household with someone with whom you have an intimate relationship but to whom you are not married?"*

(Appendix.1) and it uses numbers. It gives the percentages of the women living in a non-marital cohabitation at the time of interview by three category birth cohorts. While about 4 percent of the women born in 1960 and before currently live in a non-marital cohabitation, among the women born in 1961-1970, this figures rise to 28 percent. 25 percent of the members of the youngest cohort currently live in a non-marital cohabitation.

Table IX.1.c. 6. Percentage distribution of the women who have ever been in a non-marital status by residence, educational level and ethnic status, FFS-Bulgaria, 1997

	Ever been in a non-marital union			
Birth cohorts	**yes**	**no**	**Total**	**N**
78-79	4.3	95.7	100	92
73-77	10.4	89.6	100	335
68-72	14.4	85.6	100	432
63-67	11.6	88.4	100	421
58-62	9.1	90.9	100	450
53-57	8.9	91.1	100	358
52	6.0	94.0	100	83
Residence				
rural	6.6	93.4	100	633
urban	9.9	90.1	100	1339
Sofia	21.3	78.7	100	244
Education				
elementary	20.0	80.0	100	55
primary	7.7	92.3	100	248
secondary	8.9	91.1	100	1323
higher	13.1	86.9	100	619
Ethnic status				
bulgarian	10.2	89.8	100	1959
turk	9.6	90.4	100	187
gypsy	13.3	86.7	100	75
Total	**10.2**	**89.8**	**100**	**2360**

The question of *"Ever been in such a union?"* (FFS country report, Philipov and UNECE, 2001) is the information source of Table IX.1.c.6. Approximately 10 percent of the respondents have ever lived in non-marital cohabitations and about 90 percent have not.

It can be said that percentage of the women who have ever been in non-marital cohabitations decrease with age. The proportion of the youngest women saying that they have ever been in a non-marital union is 4 percent, that is the lowest value among all the women; 96 percent of the women aged 18-19 notify that they have not ever been in non-marital unions yet. However, about 10 percent of the second cohort indicates that they have ever lived in such a union. It is notable that the highest percent refers to the women aged 25-29 (14 percent).

In Sofia, proportion of the women who have ever been in a non-marital union is 21 percent. This proportion is remarkably higher than the proportion of women who have ever lived in non-marital unions in the other cities (about 10 percent).

The educational level of the women seems effective on the type of partnerships. Twenty percent of the graduates of primary schools who have ever lived in non-marital cohabitations is considerably higher than the proportion of high-educated women who have ever lived in non-marital cohabitations.

With regard to the ethnic groups, it is also notable that the proportion of the Gypsy women who have ever lived in marital unions is 13 percent and it is the highest value in the ethnic groups. For the Bulgarians, it falls by 10 percent. On the other hand, the highest proportion of the women who have not ever been in non-marital cohabitation refers to Turkish women (90 percent).

Table IX.1.c.7. Descriptive commentary of the relation between marital status and being in a non-marital cohabitation, FFS-Bulgaria, 1997

	Ever been in a non-marital cohabitation		
Marital status	**yes**	**no**	**Total**
Single			
Number	62	359	421
Expected number	43	378	421
Percentage	14.7	85.3	100
Std. Residual	2.9	-1.0	
Married			
Count	120	1532	1652
Expected Count	168	1484	1652
% within marital status	7.3	92.7	100
Std. Residual	-3.7	1.2	
Previously married			
Count	46	123	169
Expected Count	17	152	169
Percentage	27.2	72.8	100
Std. Residual	7.0	-2.3	
Total			
Count	228	2014	2242
% of Total	10.2	89.8	100
Chi-Square Tests			
	Value	**df**	**Sig. (2-sided)**
Pearson Chi-Square	78.7	2	0.000
Likelihood Ratio	64.1	2	0.000
N	2242		

Correlation is significant at 0,05 level

Table IX.1.c.7 implies that ever having been in a non marital cohabitation differentiates according to the marital status of women ($p<0,05$). Eighty-five percent of the single women never lived in non-marital cohabitations and the expected number is higher than the observed. However, the observed number of the single women who have ever been in non-marital cohabitations is higher than the expected and the tendency of being in a non-marital cohabitation is strong ($St.RS_y=2,9$). The married women are mostly the women who have not the experience of non-marital cohabitation (about 93 percent). 27 percent of the previously married women have experienced it and they have the highest value among the women who have ever been in non-marital unions.

> *"The high proportion of non-marital unions among previously married women is expected, since finding a new partner and breaking a marriage are likely to be correlated. It is notable that the experience of non-marital cohabitation is twice as high among the single as among the married women. Most of the latter were married only once and consequently their cohabitation was in the state of being single. Although the information is insufficient, it prompts that consensual unions must have single women over recent years" (Philipov, 2001).*

The tendency to have been in a non-marital cohabitation for the previously married women is very strong ($St.RPM_y$=7,0). The expected number of the women who have not ever lived in a non-marital cohabitation is more than the observed and it is not possible to talk about any increase in this value in the near future ($St.RPM_n$=-2,3).

> *"During the few years before the survey there was a change in behavior-first marriages gave way to unions" (Philipov ,2001).*

The behavioral changes in the partnerships depend on the reconstructed social structure afterwards the beginning of the transition period. The considerable fall in the first marriage has developed with the increase in non-marital cohabitations among the never-married women.

IX. 1. d. Parental Home

The Bulgarian society can not be considered as a society which is composed of peoples who have left traditional norms and values. On the contrary, there are many people who strictly follow traditional norms and keep the country-specific socio-cultural values. The scientists who conducted FFS-Bulgaria considered the effect of parental home on fertility and family formation important and used certain questions during the interview.

Table IX.1.d.1. Respondents who have separated or divorced parents by birth cohorts, FFS-Bulgaria, 1997

	Separated or divorced parents			
	Yes	**No**	**Total**	**N**
Birth cohorts				
78-79	7.6	92.4	100	106
73-77	10.1	89.9	100	365
68-72	8.9	91.1	100	460
63-67	6.7	93.3	100	440
58-62	4.8	95.2	100	460
53-57	3.3	96.7	100	369
52	_	100	100	84
Total	**6.5**	**93.5**	**100**	**2284**

Becoming a child who has the divorced or separated parents can predominantly determine the living arrangements in the future. Indeed, separation and divorce are traditionally rare in the country. However, divorce rates steadily increased until the transition. After the transition, the changes in the attitudes of women who consider education and career important bring about an increase in number of the non-marital cohabitations. Even if separation and divorce continue to increase particularly among the working and younger women in reproductive ages, their proportion is usually low in Bulgaria. According to Table IX.1.d.1, among the older cohorts, women who have "separated or divorced" parents is lower. The percentages are considerably higher for the younger cohorts in comparison to the percentages referring to the oldest women.

The women born in 1970s seem more unusual because number of women having separated or divorced parents is considerably higher in these years.

Table IX.1.d.2. Descriptive commentary of the relation between having separated or divorced parents and current marital status, FFS-Bulgaria, 1997

	Marital status			
	single	**married**	**previously married**	**Total**
separated/divorced parents				
Number	44	83	18	145
Expected number	28	106	11	145
Percentage	30.3	57.2	12.4	100
Standardized residual	3.1	-2.3	2.2	
not separated/divorced parents				
Number	386	1566	151	2103
Expected number	402	1543	158	2103
Percentage	18.4	74.5	7.2	100
Standardized residual	-0.8	0.6	-0.6	
Chi-Square Tests	**Value**	**df**	**Sig. (2-sided)**	
Pearson Chi-Square	20.623	2.000	0.000	
Likelihood Ratio	18.835	2.000	0.000	
N	2248			

Correlation is significant at 0,05 level

Table IX.1.d.2 asserts that marital status is significantly differentiated by the parental conditions under which women were brought up ($p<0,05$). The observed number of the single women who have the separated and divorced parents is higher than the expected, that is to say, most of them prefer to live a single life ($St.RS/D_s=3,1$). Fifty-seven percent of the women who have separated or divorced parents are married, but, the expected number is higher than the observed number and the tendency towards marriage amongst the women who have the broken families is very low ($St.RS/D_m=-2,3$). For the women who have both parents, the observed number is higher than the expected, however, this difference does not provide enough information about their thoughts about marriage ($St.RNS/D_m=0,6$).

The tendency towards marriage amongst the single women who were not brought up a broken family do not refer to a significant difference (St.RNS/D_s=-0,8).

Table IX.1.d.3. Respondents' living arrangements up to age 15 by birth cohorts, FFS-Bulgaria, 1997

	Living arrangements up to age 15					
	With both parents	**With father only**	**With mother only**	**With neither parent**	**Total**	**N**
Birth cohorts						
78-79	94.3	3.8	1.9	_	100	106
73-77	87.9	0.8	7.7	3.6	100	365
68-72	91.5	1.1	6.1	1.3	100	457
63-67	93.2	0.9	5.7	0.2	100	440
58-62	94.1	1.3	3.5	1.1	100	457
53-57	95.7	0.5	3.3	0.5	100	368
52	94.0	_	2.4	3.6	100	84
Total	**92.7**	**1.1**	**5.0**	**1.3**	**100**	**2277**

There is a psychological expectation that "Usually living arrangements up to age 15" is an important factor which can affect person's future plans on family formation. Table IX.1.d.3 points that 92.7 percent of the respondents live with both parents up to age 15, however, 5 percent live with the mother only. So, in post-transition Bulgaria, becoming a family is still the most approvable social fact and important. In general, in many countries, after the couples are divorced, parental right of the child(ren) legally belongs to the mother first. In post-transition Bulgaria, percentage of women living with mother only is less among the older cohorts. It gradually increases across age. But, during the interview, about 4 percent of the women born in the youngest cohort declared that they lived with their fathers only up to age 15.

Table IX.1.d.4. Type of place of residence up to age 15 by birth cohorts, FFS-Bulgaria, 1997

	Residence up to age 15			
	rural	**urban**	**Total**	**N**
Birth cohorts				
78-79	31.1	68.9	100	106
73-77	42.7	57.3	100	361
68-72	50.3	49.7	100	450
63-67	49.9	50.1	100	427
58-62	54.7	45.3	100	453
53-57	47.4	52.6	100	364
52	50.0	50.0	100	84
Total	**48.5**	**51.5**	**100**	**2245**

The rapid urbanization, as previously mentioned, comes across 1960s and immigration was so fast especially in the middle of 1960s.

> *"Conditions arose for the continuation of education in specialized schools that were usually situated in cities and larger towns" (Philipov, 2001).*

According to Table IX.1.d.4, particularly for the birth cohorts between 1952 and 1972, it is really difficult to assert that most of the respondents live in urban areas or in rural areas up to age 15. But, it is known that, in this period of time, "sudden urbanization" was being discussed and sought legal remedies. The proportions of the women who live in the urban and rural areas are very close to each other (almost half and half) until 1970s. At the time of the survey, average 60 percent of the women born in 1973-1979 period said that they lived in urban areas up to age 15. Thirty-one percent of the women aged 18-19 and about 43 percent of the women aged 20-24 stated that they spent the first fifteen years of their lives in the rural areas.

Table IX.1.d.5. Percentage distribution of the respondents by number of the children born by mother, FFS-Bulgaria, 1997

	Number of children born by mother					
	1	**2**	**3**	**4+**	**Total**	**N**
Birth cohorts						
78-79	19.4	59.2	16.5	4.9	100	106
73-77	19.3	62.2	12.9	5.6	100	357
68-72	15.7	60.6	15.9	7.7	100	452
63-67	14.4	62.6	14.9	8.0	100	436
58-62	13.6	64.1	15.5	6.8	100	457
53-57	10.9	62.4	19.1	7.6	100	367
52	15.7	54.2	18.1	12.0	100	83
Total	**15.0**	**62.0**	**15.8**	**7.3**	**100**	**2258**

Table IX.1.d.5 presents the percentage distribution of the respondents by number of children born by mother. “Number of children born by mother” refers to the number of children born by the respondent’s mother. It provides additional information on fertility in the parental home. It should be mentioned that number of the single-child cases gradually decreases across age. While the proportion of women aged 40-44 who have no siblings was approximately 11 percent, that of the women aged 20-24 is nearly twice as high, 19 percent. In the recent decade, single-child families significantly increase. However, the percentage for the two-child family is still prevailing and 62 percent of the respondents have at least one sibling.

The decrease in the proportion of third-child families is balanced with the increase in single or two-child families.

> *“The proportion of parent’s families with four or more children decreased less than could be expected, given the increase of the single-child family. Possibly there has been some population heterogeneity: fertility in some population groups has decreased less than in others” (Philipov , 2001).*

Table IX.1.d.6. Correlation between number of live births and number of children born by mother FFS-Bulgaria, 1997

Correlation Table		Number of live births	Number of children born by mother
Number of live births	Pearson Correlation	1	0.115**
	Sig. (2-tailed)		0.000
	N	2367	2339
Number of children born by mother	Pearson Correlation	0.115**	1
	Sig. (2-tailed)	0.000	
	N	2339	2339

**Correlation is significant at the 0.01 level (2-tailed).

Table IX.1.d.6 demonstrates that the consequence of correlation between two variables is statistically significant (P<0.05) and number of the children born to mother can be accepted as a determining factor of the future fertility behavior.

Undoubtedly parental home is considerably important to gain the values of family formation. The characteristics of the parental home affect also the fertility behavior and the preference of the type of partnership in the future. During the interview, almost 70 percent of the respondents stated that they currently live with a partner. About 97 percent of them are together with their husband and 3 percent have a partner without being married. On the other hand, the percentages of the single (never-married) women are very small. This is the most important indication of a low level of non-marital cohabitation in the country[26] (Philipov, 2001).

Table IX.1.d.7 is a part of a table arranged by the authors of the country report. The small differences between the case numbers of this study and the bases given by the report are derived from the different approaches to the variables which are grouped. According to the inferences, the proportion of the married women living with children increases across age while the proportion of married women not living with children decreases very slowly across age; particularly after the age of 40, because the children have grown and left home, the change is in inverse direction.

[26] The authors report that “the sampling bias may have changed this proportion but the “true” one would hardly affect the inference. This is not valid for many other cases”.

The proportion of the women living without a partner is around 32 percent. The number of those who do not live with children is twice as high as those who live with children (Philipov, 2001).

The proportion of single women living alone is 85 percent for the first youngest group and about 47 for the second. These are the highest values among the other types of living arrangements but it decreases rapidly across age. At the age of 35-39 it decreases by 3 percent. Younger single women living with a partner but without children have a higher proportion than the older ones. Moreover, proportion of the younger single women living with children but without a partner seems higher than the older ones. The proportion of the previously married women living only with children rises across age. In addition, proportion of those living alone rises across age; it reaches by about 7 percent for the oldest cohort.

The country report also emphasizes that the women aged 18-19 mostly lived with their parents (74 percent), but by age 20, more than 20 percent of the young women leaves home. While 24 percent of the women still live with their parents and 31 percent live with the other relatives (Philipov, 2001).

> *"The latter case is more frequent. Because other relatives could well be the husband's parents. At the youngest ages, however, "other relatives" could be the women's grandparents in the case were she lives together with her parents" (Philipov, 2001).*

Table IX.1.d.7. Percentage distribution of respondents by presence of children and/or partners, FFS-Bulgaria, 1997

	Birth cohort							
	78-79	**73-77**	**68-72**	**63-67**	**58-62**	**53-57**	**52**	**Total**
Percentage distribution of respondents by presence of children and/or partners								
a. With children. with partner (subtotal)	5.3	34.8	65.9	72.9	74	71.4	65.4	61.7
single	1.8	1.6	0.6	0.4	0.2	0.3	0.0	0.6
married	3.5	32.6	64.8	72.3	72.5	69.6	65.4	60.4
previously married	0.0	0.5	0.4	0.2	1.3	1.6	0.0	0.7
b. Without children. with partner (subtotal)	7.1	10.2	9.0	6.7	5.6	8.5	13.1	8.1
single	3.5	2.1	1.5	0.4	0.0	0.0	0.0	0.9
married	3.5	8.0	7.2	6.3	5.4	8.2	13.1	7.0
previously married	0.0	0.0	0.2	0.0	0.2	0.3	0.0	0.1
c. With children. without partner (subtotal)	2.7	4.8	8.5	12.3	13.7	12.2	10.3	10.1
single	1.8	1.9	0.6	0.7	0.9	0.3	0.0	0.8
married	0.0	1.3	4.1	5.8	5.2	3.7	3.7	3.9
previously married	0.9	1.6	3.8	5.8	7.7	8.2	6.5	5.3
d. Without children. without partner (subtotal)	85	50.3	16.6	8.1	6.7	7.9	11.2	20.1
single	85	46.8	13.4	6.7	3.2	4.8	5.6	17.2
married	0.0	2.7	2.6	0.4	1.5	1.3	2.8	1.7
previously married	0.0	0.8	0.6	0.9	1.9	1.9	2.8	1.2
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Base	**113**	**374**	**469**	**447**	**466**	**378**	**107**	**2358**

Source: FFS-Bulgaria, (Philipov, 2001)

IX. 1. e. Reproductive behavior

Table IX.1.e.1. Percentage distribution of the respondents having live births by birth cohorts, residence, education and number of live births, FFS-Bulgaria, 1997

	Number of live births					
	0	**1**	**2**	**3+**	**Total**	**N**
Birth cohorts						
78-79	93.4	5.7	0.9	_	100	106
73-77	59.5	30.4	9.3	0.8	100	365
68-72	20.9	41.7	34.6	2.8	100	460
63-67	12.5	34.3	46.6	6.6	100	440
58-62	8.5	27.6	58.0	5.9	100	460
53-57	7.9	23.6	58.0	10.6	100	369
52	10.7	22.6	54.8	11.9	100	84
Residence						
Rural	23.4	24.4	42.7	9.5	100	663
Urban	22.3	32.3	41.5	3.9	100	1410
Sofia	37.3	32.5	26.9	3.2	100	249
Education						
elementary	10.5	14.0	38.6	36.8	100	57
primary	17.0	20.1	45.1	17.8	100	264
secondary	27.9	28.0	40.6	3.5	100	1390
higher	19.2	40.2	38.9	1.7	100	650
Total	**23.9**	**30.1**	**40.6**	**5.4**	**100**	**2367**

Number of the live births are revised and classified into three groups because of the low case numbers. Fertility drastically decreases during the transition period right from its start in 1989. Table IX.1.e.1 provides evidence for the recent appearance of fertility in the country. 93 percent of the respondents of youngest cohort group state that they have not a child, while just about 60 percent of the second youngest group reports the same. Potentially, it should be expected that the youngest women who have no child(ren) are going to have the child(ren) in the subsequent years. Because, the tendency toward single-child family is widespread among the women born in the

end of 1960s and 1970s. The proportions by the birth cohorts give an estimate of the nearly completed fertility of the older cohorts. More than the half of women aged 35-39 have one child (approximately 28 percent) and most probably they have completed their reproductive periods. However, about 86 percent of the women aged 18-19 and 75 percent of the women aged 20-24 have only one child. The Bulgarian women generally want to complete their reproductive period before 30 years old and if this approach is taken into consideration, these women are more likely to have one more child in the subsequent years. The percentage of the women having two children gradually increases across age. But the tendency of becoming a woman with two children is very noticeable and clearly two-child family model in the country is supported by the results of FFS-Bulgaria. Having a third-child is not a preferable behavior for the younger cohorts.

Table IX.1.e.2. Mean number of live births by birth cohorts, FFS-Bulgaria, 1997

	Mean	**N**[27]
Birth cohorts		
78-79	1.1	7[28]
73-77	1.3	148
68-72	1.5	364
63-67	1.7	385
58-62	1.8	421
53-57	1.9	340
52	2.0	75
Mean	**1.69**	**1740**

Table IX.1.e.2 is constituted to illustrate mean number of live births by birth cohorts. The mean number of live births increases with age and for the older cohorts, it rises by 2. As for the women born in 1970s, in the opposite of the older women, the mean number of live births is just around 1. However, their young age should be taken into account; they are still at the beginning of their reproductive ages and have time to have another child.

[27] These numbers refer to the the women who have at least one children (Look appendix.2)
[28] This low figure refers to the youngest respondents who have a child. Most probably they will have the child(ren) in the future.

> *"These data indicate that a woman aged beyond 35 has had on 1,6 or 1,7 children. Completed fertility estimated by vital statistics data by age 50 is higher, namely around the replacement level of 2,1. The difference of 0,4 can be attributed partially to the fall in fertility during the 1990s and partially to the fact that fertility to the interviewed women in these older cohorts is nearly, but not entirely, completed" (Philipov, 2001).*

As for the ideal number of children, it was achieved from the responses given to that question: *"How many children do you think is the ideal number for a family to have in this country?"*.

Table IX.1.e.3a. Ideal number of children, FFS-Bulgaria, 1997

Ideal number of children	Frequency	Percent
not necessary	2	0.1
one	248	12.3
one or two	250	12.4
two	601	29.8
two or three	789	39.1
three	108	5.4
three or four	14	0.7
four	4	0.2
four or five	1	0.0
Total	**2017**	**100**

This question was asked to all women without looking at their current marital status. As previously mentioned, the desired family size for Bulgaria corresponds to the "two-child family model". But, while the reported ideal number of children refers to a family model with two or three children, mean number of the live births (about 1.7) very nearly reveals the "two-child family model" in the country (Table IX.1.e.3a). Such a case is not curious for the demographers because, as seen in the national research reports of many developing countries, the achieved ideal number of

children, which can be obtained from the similar question forms, is usually higher than the observed ones as in the FFS-Bulgaria data.

Table IX.1.e.3b. Mean number of the live births by ethnic status, residence and education, FFS-Bulgaria, 1997

	Mean	N
Ethnic status		
Bulgarian	1.6	1537
Turk	2.0	167
Gypsy	2.3	71
Total	**1.7**	**1775**
Residence		
rural	1.8	508
urban	1.6	1251
Total	**1.7**	**1759**
Education		
elementary+primary school	2.1	270
secondary school	1.7	1002
higher school	1.5	525
Mean	**1.7**	**1797**

Mean number of the live births is differentiated according to the ethnic identifications of the respondents (Table IX.1.e.3b). As it is expected, the lowest mean belongs to Bulgarian women (1.6) and the highest mean belongs to Gypsy women (2.3). For the Turkish women, the mean is 2.0 and it is also very high figure for the Bulgarians living in post-transition Bulgaria. As for the Gypsies, in spite of the low case number in FFS data, it should be considered that their fertility behavior is uncounted as firstly, Gypsies have a traditional tendency to have many children, secondly each live birth is seen as an economic benefit which earns money with sometimes legal, sometimes illegal ways. Even in 2000s, the most crowded family

forms (families with three or more children) are generally observed among the Gypsy people in Bulgaria.

In the urban areas mean number of the live births 1.6, in the rural areas this figure does not change too much, it rises to 1.8.

As regards educational level of the respondents, mean number of the live births for the graduates of elementary and primary schools is 2.1. For the graduates of secondary schools it falls to 1.7 and, for the graduates of higher schools it is 1.5. In other words, when the educational level increases, mean number of the live births decreases.

Table IX.1.e.4. Descriptive commentary of the relations of number of live births with ethnic status and religion, FFS-Bulgaria, 1997

	Number of live births				
Ethnic status	**0**	**1**	**2**	**3+**	**Total**
Bulgarian					
Number	534	662	809	66	2071
Expected Count	498	627	837	109	2071
Percentage	25.8	32	39.1	3.2	100
Std. Residual	1.6	1.4	-1	-4.1	
Turk					
Number	22	31	103	33	189
Expected Count	45	57	76	10	189
Percentage	11.6	16.4	54.5	17.5	100
Std. Residual	-3.5	-3.5	3	7.3	
Gypsy					
Number	6	14	33	24	77
Expected Count	19	23	31	4	77
Percentage	7.8	18.2	42.9	31.2	100
Std. Residual	-2.9	-1.9	0.3	9.9	
Religion					
Bulgarian orthodox					
Number	333	445	528	62	1368
Expected Count	310	418	561	79	1368
Percentage	24.3	32.5	38.6	4.5	100
Std. Residual	1.3	1.3	-1.4	-1.9	
Islamic					
Number	17	26	105	27	175
Expected Count	40	53	72	10	175
Percentage	9.7	14.9	60	15.4	100
Std. Residual	-3.6	-3.8	3.9	5.3	
Total					
Number	350	471	633	89	1543
Percent of Total	22.7	30.5	41	5.8	100
Chi-Square Tests-Live births and ethnic status					
	Value	df	Sig. (2-sided)		
Pearson Chi-Square	219.7	6	0.000		
Likelihood Ratio	157.4	6	0.000		
N of Valid Cases	2337				
Chi-Square Tests-Live births and religiousness					
	Value	df	Sig. (2-sided)		
Pearson Chi-Square	79.8	3	0.000		
Likelihood Ratio	76.0	3	0.000		
N of Valid Cases	1543				

*Correlation is significant at 0,05 level

Table IX.1.e.4 is constituted for examining two separate relationships: a) relation between number of the live births and the ethnic status, b) relation between number of the live births and the religion of the respondent. It can be said that the number of live births differentiates according to the ethnic and religious identifications of the women ($p<0,05$ for both). For the Bulgarian women who have 2 and more live births, all the expected numbers are higher than the observed numbers. The two-child model is easily perceivable. However, even if the percentage of women having two children is higher than ones who have one child, tendency to have one child is more perceivable for the future ($St.RB_1=1,4$). Percentage of the Turkish women who have two children is about 55 percent and higher than the Turkish women who have the different birth orders. However, the expected values of the second birth order is lower than the observed values, which is the opposite of the first birth order. Moreover, tendency to have one child and/or the childlessness is clearly disappeared ($St.RT_1=-3,5$) while tendency to have two children clearer. ($St.RT_2=3$). According to the very strong and significant difference between the observed and the expected values, the Gypsy women generally want to have three or more children, the tendency reflecting from the numbers is also in that manner ($STRG_{3+}=9,9$). They strongly do not prefer to become “a woman with single-child” ($St.RG_0=--2,9$) or childless ($St.RG_0=-1,9$).

Figure IX.1.e.1 and Figure IX.1.e.2 show the standard residuals. They provide to see the change of tendencies regarding number of children in the ethnic and religious context. The Turkish women’s responses are in favor of having two or three children, Gypsies most likely to have three or more children and Bulgarians have a positive tendency to become childless or with single-child. Religious aspects of the Bulgarian society are not entirely included by the data. There are two religious groups: Bulgarian Orthodoxies and Muslim. The religiousness of the respondents supports all the consequences derived from the relationship between number of live births and ethnic status. For the Muslims, tendency to have two or more children is remarkably stronger than the Bulgarian orthodoxies.

Figure IX.1.e.1. Standard residuals by number of live births in the given ethnic context, FFS-Bulgaria, 1997

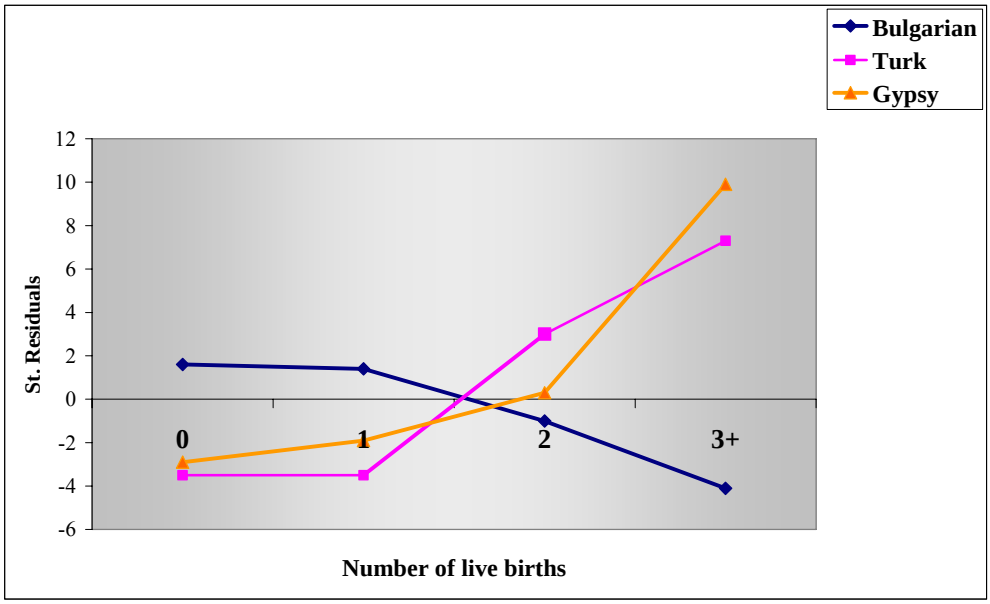
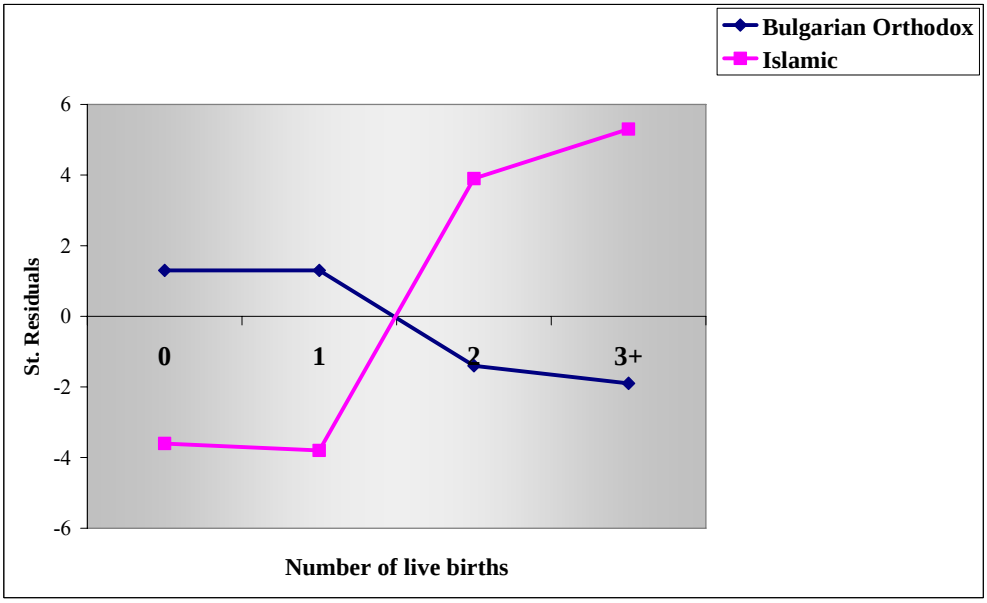


Figure IX.1.e.2. Standard residuals by number of live births in the given religiousness context, FFS-Bulgaria, 1997



IX. 1. f. Contraception

Along with the transition period, disintegration of the society and loss of the social values changed the sexual behaviors of the young women in post-transition Bulgaria. According to Table IX.I.f.1, for all birth cohorts**,** the first intercourse is generally experienced at the age of 19 or before. However, the proportions of the women who experience their first intercourse at age of 19 or less decreases across age. About 21 percent of the women born after 1971 stated that they experienced their first intercourse when they are between 20 and 24 at the time of interview.

Table IX. 1.f.1. Age at first intercourse and first contraception by birth cohorts, FFS- Bulgaria, 1997

	Birth cohorts			
	-1960	**1961-1970**	**1971-1980**	**Total**
Age at first intercourse				
-19	54.4	66.7	79.1	65.2
20-24	42.5	31.1	20.7	32.8
25-29	2.4	2.3	0.2	1.8
30+	0.6	_	_	0.2
Total	100	100	100	100
N	656	747	426	1829
Age at first contraception				
-19	15.9	24.6	61.5	29.2
20-24	58.3	55.6	37.1	52.9
25-29	17.3	15.2	1.4	12.9
30+	8.5	4.7	_	5.1
Total	100	100	100	100
N	788	875	644	2307

The usage of the contraceptive methods has increased since 1990 since it was restricted during the totalitarian regime. The usage of the contraceptive methods is more often among the young women born in 1971-1980. Table IX.I.f.1 suggests that about 62 percent of the women born after 1971 uses contraceptive before 19 years old first. During the interview, about 58 percent of the women born in 1960 and before indicated that they started to use contraceptive methods when they were

between 20 and 24 years old. Most probably, the older women relied on induced abortion to prevent the undesirable births.

Table IX.1.f.2. Median age at first sexual intercourse, FFS- Bulgaria, 1997

Birth cohorts	Median age at first sexual intercourse
78-79	_
73-77	18.7
68-72	19.1
63-67	19.1
58-62	19.5
53-57	19.9
52	19.7
Total	**19.3**

Table IX.1.f.2 shows the median age at first intercourse. As previously mentioned, it grows across age. It rises by 19,7 for the oldest cohorts. The women aged 20-24 experiences when they are about 19. Most probably, the young members of the youngest cohort experience their first intercourse at around 18.

Table IX.1.f.3. Marital status of the respondents by the first usage of contraceptive methods, FFS- Bulgaria, 1997

	Marital status			
	single	**married**	**previously married**	**Total**
Contraception at first intercourse				
yes	51.5	26.0	28.8	29.9
no	48.5	74.0	71.2	70.1
Total	**100**	**100**	**100**	**100**
N	**262**	**1446**	**146**	**1854**
First used modern methods	**66.5**	**53.4**	**60.2**	**56.3**
st. self or partner. injection. diaphram. foam. etc.	0.5	1.5	1.9	1.3
pill	14.2	17.8	19.4	17.3
intra-uterine device	2.8	7.7	10.2	7.1
condom	49.1	26.4	28.7	30.6
First used traditional methods	**30.7**	**44.9**	**38.0**	**41.8**
periodic abstinence	7.8	7.4	5.6	7.3
withdrawal	22.9	37.5	32.4	34.5
Any other methods	**2.8**	**1.7**	**1.9**	**1.9**
Total	**100**	**100**	**100**	**100**
N	**462**	**1721**	**175**	**2358**

Table IX.1.f.3 points out the percentage distribution of the first usage of contraceptive methods among the respondents. The questions *"Ever used contraception?"* and *"Which contraceptive method or combination of methods did you and/or the other person use at that time?"* (Appendix 1) are used to collect the information. Share of the women who used the traditional contraceptive methods is almost 42 percent whereas proportion of the women who used the modern contraceptive methods is about 56 percent.

According to the table, about 49 percent of the single women did not use any contraceptive methods during their first intercourse. Among the married women, 74 percent indicated that they did not use any contraceptive methods at that time.

Similarly, most of the previously married women did not apply to contraceptive methods during their first intercourse. As to first used modern methods, among the single women, 49 percent of the single women used condom and 14 percent indicated they used pill first. Among the married women, 26 percent applied to condom first and approximately 18 percent of them used pill. Almost 29 percent of the previously married women used condom and 20 percent of them applied to pill. With regard to the first used traditional method, withdrawal seems the most favorite contraceptive method among the others. Almost 23 percent of the single women protected themselves from becoming pregnant by using this method first. About 38 percent of the married women and, 32 percent of the previously married women used the withdrawal. On the other hand, proportion of using any other methods is about 2 percent.

The authors of the country report summarize the usage of contraceptive methods:

> *"The data indicate that the traditional withdrawal method is the most widely used one. Nearly one third of all the women gave this method their preference. It is curious to find that another traditional method such as abstinence (or calendar) is barely used at all. Condoms are the most preferred among the mechanical methods. The pill is used by 16[29] percent of all women that use contraceptive methods and have had sex recently. Sterilization is not used at all" (Philipov, 2001).*

[29] During the analysis of the data, this value is calculated "14 percent".

Table IX.1.f.4. Marital status of the respondents by currently used contraceptive methods, FFS- Bulgaria, 1997

	Marital status			
Current contraceptive use	**single**	**married**	**previously married**	**Total**
yes	60.4	72.6	48.5	69.0
no	39.6	27.4	51.5	31.0
Total	**100**	**100**	**100**	**100**
N	**192**	**1001**	**99**	**1292**
Modern methods	**78.3**	**61.5**	**77.6**	**64.7**
st. self or partner. injection. diaphram. foam. etc.	2.6	3.0	2.0	2.9
pill	17.4	15.5	20.4	16.0
intra-uterine device	3.5	16.9	26.5	15.7
condom	54.8	25.7	28.6	29.7
Traditional methods	**21.7**	**38.5**	**22.4**	**35.3**
periodic abstinence	2.6	5.8	2.0	5.2
withdrawal	19.1	32.3	20.4	29.9
Total	**100**	**100**	**100**	**100**
N	**115**	**699**	**49**	**863**

According to table IX.1.f.4, totally 69 percent of the women currently use contraceptive methods. Among the single women, 60 percent indicate that they use contraceptive methods whereas among the previously married women about 52 percent do not use any contraceptive methods. Proportion of the married women who use contraceptive methods is higher than that of other two groups; about 73 percent.

Almost 65 percent of the women use the modern methods and around 35 percent apply to the traditional methods. Among the single women, about 55 percent use condom and around 17 percent use pill. Approximately 26 percent of the married women use condom; 17 percent use intra-uterine device and about 16 percent use pill. Proportion of the previously married women who use condom is about 29 percent. About 27 percent apply to intra-uterine device and around 20 percent prefer to use pill. It is exact that the modern methods are mostly used by single women and,

condom is the most favorite contraceptive method among the single women. However, proportions of the married or previously married women who use condom exceed 25 percent. With regard to traditional methods, 39 percent of the married women use the traditional methods and most of them prefer to use withdrawal. On the other hand, usage of periodic abstinence refers to low percentages (5 percent total). Nevertheless, among the married women, usage of the periodic abstinence is two times more than single women.

IX. 1. g. Abortion

Abortion is usually one of the critical issues of the Bulgarian government and the women living in Bulgaria. Because during the socialist rule, which has pronatalist policies in character, usage of the contraceptive methods and abortion were strictly determined but abortion was the only solution for many women who became undesirably pregnant. By 1980s modern contraceptive devices could not be used. In the 1980s, usage of condom and intra-uterine device was made available. Many women either used these devices in a bad quality or applied induced abortion desperately. It's because Bulgaria was known as one of the countries which have the highest abortion rate in the world. However, the abortion rate was high after 1990 since contraceptive devices were difficult to obtain and expensive. After the collapse of totalitarian population policies, economic uncertainty, high inflation and impoverishment do not let the authorities change the conditions of family planning.

Figure IX. 1.g.1. Decision in case of unintentional pregnancy, FFS-Bulgaria, 1997

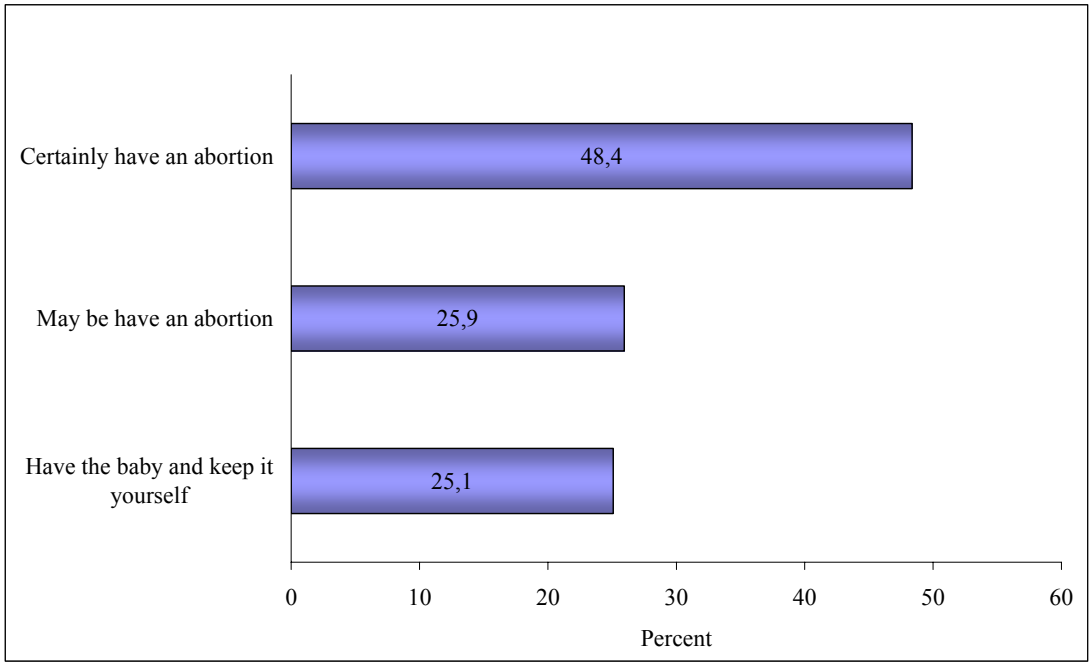


Figure IX.1.g.1 points the attitudes of women to abortion at the time of interview. The question is *"If you became unintentionally pregnant anyway, what would you do?* (Appendix 1). One of the options was "*Have the baby and give it up for adoption*" was ignored during the analysis because of its too small number.

Forty-eight percent of the women indicate that if they become intentionally pregnant, they certainly have an abortion and about 26 percent indicate that probably they have an abortion. These inferences show that, at the time of the survey (1997) the tendency to have abortion continues to prevail among the women living in post-transition country, even in the seven years after the transition. The proportion of the women who indicate that they will have the baby and keep it themselves is 25 percent.

Table IX.1.g.1 examines the approval of abortion according to the given conditions. About 85 percent of the women approve abortion when mother's health is

at risk from pregnancy. The proportion of the women born in 1953-1957 is higher than the others (above 87 percent). 85 percent of Bulgarians approve abortion in case of health risk of mother while percentage of the other ethnic groups approving it is around 75-79 percent. The women having higher education and approving the abortion in that case amount to 89 percent. The women living in Sofia are certainly approved abortion while the women living in rural areas are a bit reluctant. Secondly, about 77 percent of the women can approve abortion if the child is likely to be born physically handicapped. Half of the Gypsy women do not approve that. Educational level seems effective on this decision; almost 83 percent of the women who have higher education approve abortion in that case. The rural women are a bit reluctant again while ones living in Sofia do certainly approve the abortion. On the other hand, if the women are not married, the abortion is not necessary with respect to around 80 percent of the women. It should be said that, such opinion probably decreases across age, except the young cohorts.

Table IX.1.g.1. Percentage distribution of the women for approval of abortion by their basic characteristic, FFS-Bulgaria, 1997

	When the mother's health is at risk from pregnancy	When the child is likely to be born physically handicapped	When the women is not married	When a married couple does not want to have any more children	When the women does not wish to have a child for the time being	N
	approve	approve	approve	approve	approve	
Birth cohorts						
78-79	83.0	77.4	23.6	46.2	40.6	106
73-77	80.8	78.6	17.8	53.7	41.1	365
68-72	83.5	76.5	16.5	52.6	43.0	460
63-67	87.0	79.1	18.0	50.9	38.4	440
58-62	83.5	76.7	20.9	50.9	39.6	460
53-57	87.3	79.4	29.0	49.3	40.7	369
52	88.1	75.0	27.4	57.1	51.2	84
Ethnic status						
Bulgarian	85.4	78.4	20.1	53.5	42.9	2071
Turk	79.4	72.5	26.5	40.2	20.1	189
Gypsy	75.3	49.4	16.9	24.7	20.8	77
Education						
elementary	86.0	77.2	15.8	26.3	12.3	57
primary	73.9	64.8	25.4	38.6	33.0	264
secondary	84.7	76.8	19.4	52.3	40.0	1390
higher	89.2	82.8	21.2	56.9	46.2	650
Residence						
Rural	77.4	72.7	29.3	47.8	32.3	663
Urban	86.2	77.0	16.2	51.2	41.9	1410
Sofia	94.0	92.8	24.1	65.9	56.2	249
Total	**84.5**	**76.9**	**20.6**	**51.5**	**40.3**	**2367**

IX. 1. h. Why do (not) the women living in post-transition Bulgaria want a(nother) child?

After the transition, the indefinite economic conditions and bad straits due to high inflation stimulated people to behave more self-possessed almost about every matter regarding social life in order to survive. One of the important matters is undoubtedly to keep the present situation and never let somebody interfere with this struggle. Becoming a family and "growing in number" are the targets which are socially determined and necessitate responsibilities which are culturally and socially defined.

Since 1989 the percentages of the women who have no child and who have one child have begun to rise. On the other hand, number of the births has gradually decreased. The mean age of mothers decreased until the beginning of 1980s and then started to increase. Such a change has been observed in many other European countries but it is not clear that whether the driving forces are the same. In fact, the rise in the mean age at first birth speeded up after 1989, as a result of a significant postponement of births (Philipov, 2001).

Three important reasons for not wanting another child

In 1997, during the Fertility and Family Survey, the reasons for (not) wanting a(nother) child are asked the women. Table IX.1.h.2a consists of the responses of the women and includes only the options they found "important". The first reason was that the children are expensive especially when they grow up (74 percent), the second reason was that the bringing up children entails many worries and problems (62 percent) and thirdly they indicated that their house is not suitable for a larger family (55 percent). When the reasons are examined according to the basic social characteristics of the women the list of importance is not changing.

The first reason: Children are expensive especially when they grow up

The first reason is important especially for the women for who have graduated from elementary and the secondary schools (94 and about 84 percent respectively). As regards the birth cohorts, the older cohorts have lower percentages than the others but the values are generally close to each other. The proportion of the single women who consider that children are expensive is higher than the other ones (about 86 percent). The rural women also more encourages this approach than the women living in urban and Sofia. The proportion of the employee women sharing the same opinion is less than the proportion of ones who have different jobs. Interestingly, expensiveness of the children is more important for the minorities in post-transition Bulgaria.

The second reason: Bringing up children entails many worries and problems

As for the second reason, "bringing up children entails many worries and problems", it can be said that when the educational level increases, this reason becomes more important. The proportions of the older cohorts who indicated that children bring about worries and problems are fewer than the subsequent cohorts referring to 1958-1972. However, the young women born between 1973 and 1977 and sharing the same opinion are in the same proportion with their counterparts born in 1950s and 1960s. Despite the fact that the half of the single women consider that children bring about new problems, 61 percent of the married women and 76 percent of the previously married women agree with those who think that. About 71 percent of the women living in the rural areas mostly see children as the source of worries and problems; it is more than the proportion of the women living in Sofia, which is about 69 percent. In accordance with the ethnic status, the Bulgarian women give more importance to this reason (62 percent) while they do not think to have a(nother) child.

The third reason: My house is not suitable for a larger family

Thirdly, the women state that their houses are not suitable to raise the child(ren); probably because of its small size. The percentage of the older cohorts who agree with this opinion is fewer than the youngest cohorts, that is to say; when the age increases, the people who are against this opinion also increase. While about 76 percent of the women having low education indicate that their house is not suitable enough for a larger family, the proportion of the well-educated women sharing this opinion is 53 percent. 61 percent of the single women think that their house is not suitable for a larger family, while the proportion of married women who agree with them is about 55 percent. In Sofia, approximately 72 percent of the women give support to this opinion and this is the highest value among the percentages by the types of place of residence. In the rural areas this proportion falls by 48 percent. According to the employment status, the proportions of the employee women who do not find their house large enough to raise the child(ren) is about 54 percent; a bit higher than the proportion of women who have different jobs. The Gypsy women indicate that their houses are small for a larger family and this is an expected result because most of them are half-sedentary and live under very poor conditions. The proportion of the Bulgarian women signifying the same reason is 55 percent; about ten percent higher than the Turks.

Three important reasons for wanting a(nother) child

Table IX.1.h.2b includes the reasons for wanting a(nother) child. The result shows that in fact many women want to have children and enjoy to raise children but the poor socio-economic conditions, perhaps also socio-psychological determinations in the society prevent the women to have a(nother) child. Because about 94 percent of the women say that having children imparts a special feeling of joy. This is the first reason for wanting (a)nother child. The second is a similar reason: it is a fine thing to see children grow up and develop (87 percent). The third one is that it gives satisfaction to see the family carried on (about 89 percent).

The first reason: Having children imparts a special feeling of joy

The women who have primary or secondary education (95 percent and 96 percent respectively) point out that having children imparts a special feeling of joy and their proportions are higher than the other graduation groups. Interestingly, there is an inversely relation between the birth cohorts and this statement; when the ages of women increase, the proportions referring to this reason decrease. The single and married women give importance to this reason upwards of the previously married counterparts (97 and about 91 percent respectively). The proportions by the types of place of residence are not very different, the all are more than 93 percent. The similar tendency is current for the women having different ethnic identifications.

The second reason: It is fine thing to see children grow up and develop

All of the graduates of elementary school, 80 percent of the graduates of primary school, 91 percent of the graduates of the secondary school and about 88 percent of the graduates of higher schools suggest that it is fine things to see children grow up and develop. The constituents of all the birth cohorts have high proportions referring to this reason except the women born in 1953-1957, most probably their order of preference regarding the options is different. For instance, 81 percent of them prefer the reason that having children strengthens the relationship with the partner. About 91 percent of the married women indicate that it is a fine thing to see children grow up and develop. The proportions referring to the residential differences are also very close to each other, particularly proportions of the women residing in rural areas and Sofia and enjoying to see the child(ren) while she/he is growing up are higher than living in the urban (more than 92 percent each). The women who are not employee share this thought with a much higher proportion than the employees (about 96 percent). The proportion of the Turks suggesting this reason is 90 percent; a bit higher than the other ethnic groups.

The third reason: It gives satisfaction to see the family carried on

It is the third reason for wanting a(nother) child; however, it can be seen as a most important result in terms of its special content on the joy of seeing the family integrity.

According to the educational levels, the importance of the reason that it gives satisfaction to see the family is quite high for all the graduation groups. Also according to the birth cohorts, the preference of this option does not differentiate very much. 92 percent of the women born between 1963 and 1967 and about 69 percent of the women born between 1953 and 1957 imply the function of the child(ren) concerning family integrity. The women living in the urban areas and the capital city, Sofia give more importance to this function (around 87 for both) than their counterparts living in rural areas (82 percent). The proportions of the Turkish and Gypsy women sharing the main opinion are higher (about 97 percent and 100 percent respectively) than the Bulgarians.

Table IX.1.h 2a. Percentage distribution of the women by reason for not wanting a(nother) child by their basic characteristics, FFF-Bulgaria, 1997

Education	Children are expensive especially when they grow up	Children make it harder for a woman to have a job	Pregnancies. births and the care of children are hard on a woman	There would not be enough time for other important things in life	Bringing up children entails many worries and problems	My house is not suitable for a larger family	N
	important	important	important	important	important	important	
elementary school	94.3	38.7	32.4	11.5	50.0	76.5	57
primary school	83.6	32.8	43.4	26.9	61.8	54.5	264
secondary school	73.2	28.9	42.5	26.0	63.3	54.9	1390
higher	69.8	33.2	44.3	24.5	61.4	53.3	650
Birth cohorts							
78-79	100.0	100.0	50.0	0.0	0.0	50.0	106
73-77	73.6	28.3	34.0	17.8	53.2	53.2	365
68-72	77.7	34.1	40.1	29.8	66.5	60.2	460
63-67	80.1	34.3	43.8	24.3	66.2	55.6	440
58-62	69.7	31.1	44.3	27.4	63.0	55.7	460
53-57	73.7	24.7	41.4	20.4	58.6	53.7	369
52	73.2	26.9	50.0	19.6	53.7	47.1	84
Marital status							
single	85.7	25.0	16.7	33.3	50.0	61.5	462
married	73.4	29.4	41.6	25.1	61.1	54.8	1721
previously married	79.2	47.7	58.7	27.1	76.3	58.0	175
Residence							
rural	83.1	29.3	48.8	27.7	70.7	48.1	663
urban	70.1	31.2	40.6	25.1	58.5	55.3	1410
Sofia	72.6	35.6	43.1	23.3	68.9	71.7	249
Employment status							
employee	71.9	29.9	42.6	24.9	61.5	54.2	1212
other employment status	79.3	32.7	43.6	25.0	66.7	50.9	122
Ethnic status							
Bulgarian	71.8	30.7	42.8	24.3	62.3	55.0	2071
Turk	89.3	30.9	45.9	34.4	59.8	48.0	189
Gypsy	88.9	35.5	31.0	29.2	61.3	80.0	77
Total	**74.1**	**30.8**	**42.8**	**25.3**	**62.2**	**55.1**	**2362**

Table IX.1.h.2b.Percentage distribution of the women reason for wanting a(nother) child by their basic characteristics , FFS-Bulgaria. 1997

	Children make it less likely that one will be lonely in his old age	Children give a sense of responsibility and help a person develop	It is a fine things to see children grow up and develop	It gives satisfaction to see the family carried on	Having children imparts a special feeling of joy	Having children strengthens the relationship with the partner	
Education	important	important	important	important	important	important	N
elementary	100.0	100.0	100.0	100.0	75.0	100.0	57
primary	75.0	73.7	80.0	89.5	95.0	77.8	264
secondary	77.9	78.7	91.2	87.7	96.2	79.9	1390
higher	67.7	86.5	87.8	83.8	88.8	68.6	650
Birth cohorts							
78-79	70.7	78.0	88.9	88.7	93.8	80.8	106
73-77	76.3	74.7	89.7	85.5	95.2	83.8	365
68-72	78.0	87.2	89.2	85.2	94.1	74.2	460
63-67	68.5	84.3	92.8	92.3	92.9	65.7	440
58-62	80.5	90.5	89.1	86.7	92.9	62.1	460
53-57	73.7	72.2	77.8	68.8	83.3	81.3	369
52	100.0	100.0	100.0	100.0	100.0	100.0	84
Marital status							
single	73.6	74.1	88.7	82.2	97.0	80.3	462
married	77.1	86.7	90.8	91.9	90.9	77.5	1721
previously married	63.0	89.3	81.5	78.6	88.9	36.4	175
Residence							
rural	76.6	84.3	92.7	81.9	94.3	90.4	663
urban	75.8	80.6	86.8	87.8	93.1	76.2	1410
Sofia	71.3	75.5	92.4	87.5	94.6	59.2	249
Employment status							
employee	73.2	83.8	89.6	88.4	92.7	71.6	1212
other employment status	77.3	95.5	95.5	71.4	91.3	64.7	122
Ethnic status							
Bulgarian	73.8	80.6	89.3	85.6	93.6	78.4	2071
Turk	80.6	82.8	90.0	96.7	93.3	60.9	189
Gypsy	84.6	83.3	84.6	100.0	100.0	50.0	77
Total	**74.8**	**80.8**	**89.3**	**86.7**	**93.8**	**76.7**	**2362**

Table IX.1.i.3. Percentage distribution of the women for reason for splitting up by their basic characteristics. FFS-Bulgaria. 1997

Education	Drinks too much sufficient	Lack of love sufficient	Personality clashes sufficient	Aggressive behaviour sufficient	Unsatisfactory division of household tasks sufficient	Unfaithful behaviour sufficient	Unsatisfactory sexual relationship sufficient	Inability to have children sufficient	N
elementary	61.9	46.2	38.5	76.7	9.5	27.0	43.2	73.5	57
primary	57.8	42.2	34.1	77.4	6.6	34.0	17.0	18.1	264
secondary	74.7	57.8	38.8	87.9	11.1	46.2	32.9	23.9	1390
higher	84.0	59.7	39.9	91.8	13.7	49.4	30.3	18.9	650
Birth cohorts									
78-79	89.5	87.7	52.9	95.6	14.9	61.8	53.2	37.7	106
73-77	83.7	63.4	39.9	90.8	9.7	50.6	35.6	27.8	365
68-72	71.7	60.9	40.1	90.0	12.0	47.2	34.8	24.0	460
63-67	79.6	56.8	37.6	88.4	15.3	46.0	28.3	17.4	440
58-62	70.3	52.3	34.7	86.3	10.3	43.3	27.0	21.7	460
53-57	72.3	48.7	35.6	85.5	9.1	41.7	28.5	22.3	369
52	70.0	35.4	36.4	83.8	5.6	29.0	22.1	15.4	84
Marital status									
single	91.3	75.7	47.6	94.5	14.8	62.3	47.6	31.5	462
married	69.7	50.9	34.8	85.5	9.7	39.9	26.1	20.0	1721
previously married	91.3	66.4	52.3	92.4	18.8	59.0	42.1	31.9	175
Residence									
Rural	72.0	54.6	36.0	82.4	9.8	41.1	27.5	23.1	663
Urban	75.4	55.6	38.7	89.6	11.5	44.9	30.6	21.6	1410
Sofia	83.9	69.2	42.6	91.6	15.2	61.8	42.8	31.5	249
Employment status									
employee	76.7	54.8	35.8	89.0	11.1	44.5	31.9	21.7	1212
other employment status	71.4	57.7	40.2	85.5	17.6	53.0	25.0	26.1	122
Ethnic status									
Bulgarian	76.6	59.0	39.4	89.1	11.6	47.7	31.8	22.2	2071
Turk	70.8	38.8	31.3	77.2	10.2	24.0	27.1	30.9	189
Gypsy	45.8	33.3	30.4	75.0	6.3	35.6	15.1	27.6	77
Total	**75.1**	**56.5**	**38.4**	**87.7**	**11.3**	**45.4**	**30.9**	**23.0**	**2362**

IX.1.i. Why do (not) women want to split up?

Table IX.1.i.3 includes eight reasons for splitting up. Firstly, about 88 percent of the women do not want to bear a partner who has aggressive behavior at home. Secondly, a heavy-drinking partner is not preferred by the women; 75 percent indicated that it is one of the reasons for splitting up. Thirdly, "lack of love" is important to keep family as a whole; for 57 percent, "lack of love" is a reason for splitting up. The fourth reason for splitting up is "unfaithful behavior"; about 45 percent indicate that it is a reason for breaking family unity. "Personality clashes", "unsatisfactory sexual relationship", "inability to have children" and "unsatisfactory division of household tasks" are also among the reasons for splitting up respectively. By this study, the first four reasons are examined in details.

The first reason: Aggressive behavior from partner/husband

Generally the women who have secondary and high education do not prefer partners who have aggressive manners. 88 percent of the graduates of secondary school and about 92 percent of the graduates of higher schools find sufficient the "aggressive behavior from partner/husband" for splitting up. In accordance with the birth cohorts, the women born in younger cohorts mostly indicate that it is a reason for splitting up. Among the women who born in 1978-1979, percentage of the defenders of this is very higher than the other birth cohorts. This attitude is inversely related with age, in other words, the older cohorts (particularly those born in the ten-year period between 1952 and 1962) appear more indulgent to the quick-tempered partners than their counterparts born after 1970. As for the marital status of women, married women seem more indulgent to these kinds of partners whereas more than 90 percent of the single and previously married women do not prefer an aggressive man. In relation to the types of place of residence, around 82 percent of the women living in the rural areas see aggressive behavior as a reason for splitting up, but this figure rises to almost 90 percent for the women living in the urban areas. It reaches about 92 percent in Sofia, the capital city. Employment status of the women seems effective on the women's opinions. 89 percent of the employee women indicate that aggressive behavior from the partner is a reason for splitting up. According to the

ethnic status of the women, the results are interesting: The women who are not ethnically Bulgarian appear more indulgent to the easily incensed partners or partners. 89 percent of the women see the aggressive behavior from the partner as a reason for splitting up. Then again, the Gypsy women seem more tolerant to the aggressive partners or husbands than their Turkish counterparts (75 percent and 77 percent respectively).

The second reason: Drinks too much

For the women graduated from the secondary education and higher, heavy-drinking partner/husband is a good reason for splitting up, about 75 percent of the graduates of secondary schools and 84 percent of the graduates of higher schools give importance to this reason. The members of older cohorts again seem more tolerant to the heavy-drinking partner/husband than the members of younger cohorts. Especially women born after 1973 are not indulgent to these kinds of partners; about 90 percent of the women born in 1978-1979 and about 84 percent of the women born in 1973-1977 indicate that the partner or husband drinking too much is a reason for breaking family unity. Interestingly, percentage of the married women who indicate the same thing is very low than their single and previously married counterparts. While the percentages of the single and previously married women who do not want a partner drinking too much exceed 90 percent, percentage of the married women who think the same is about 70 percent. In accordance with the types of place of residence, 72 percent of the women living in the rural areas of the country find this reason sufficient to split up, but this figure rises to 75 percent in the urban areas and about 84 percent in Sofia. Also for about 77 percent of the employee women, a heavy-drinking partner/husband is a reason for splitting up. Ethnically, percentage of the Gypsy women who give importance to this reason is quite low; about 46 percent while approximately 77 percent of Bulgarian women and 71 percent of Turkish women indicate that this is a “sufficient” reason for splitting up.

The third reason: Lack of love from partner/husband

The "lack of love" can be described as the situation that a woman does not see the sufficient interest and love from her partner/husband. Generally the women who have secondary and higher education care this situation and find it sufficient to split up (about 58 percent and about 60 percent respectively) whereas for the lower educated women this percentage falls below 47 percent. With regard to the birth cohorts, the percentage of the women who think that "lack of love" is a reason for splitting up is inversely related with age; the members of the younger cohorts, especially those born after 1978 (about 88 percent) are not very indulgent to the partners or husbands who have not sufficient love to keep the family unity as the members of the older cohorts. As for the marital status, married women seem more tolerant to the uninterested partners than their single and previously married counterparts. More than half percent of the married women find it sufficient for splitting up whereas this percent exceeds 75 percent for the single women. According to the types of place of residence, this opinion does not considerably change: about 55 percent of the women living in the rural areas and about 56 percent of the women living in the urban areas indicate that "lack of love" is a sufficient reason for splitting up. This figure rises to around 69 percent for the women living in Sofia. Interestingly, while percentage of the employee women who care the uninterested behavior of the partner/husband is almost 55 percent among the women who have different jobs this percentage rises 58 percent. In relation to the ethnic status of the women, Bulgarian women give more importance to the "lack of love" (59 percent) than their counterparts who are not ethnically Bulgarian and find it sufficient to split up.

The fourth reason: Unfaithful behavior

Generally, "unfaithful behavior" does not show considerable percentages as the other three reasons. The women who have secondary and higher education find the "unfaithful behavior" sufficient for splitting up (around 46 percent and 49 percent respectively). According to the birth cohorts, there is an inverse relation between the

percentages of the defenders of this opinion and age; for the women born in 1952 the percentage is 29 percent, however; for the women born in 1968-1972, it reaches 47 percent, in the end for the women born after 1978 it rises to about 62 percent. In relation to the marital status, single and previously married women give more importance to “unfaithful behavior” than their married counterparts (62 percent, 59 percent and about 40 percent respectively). Regarding types of place of residence, about 62 percent of the women living in Sofia find “unfaithful behavior” sufficient for splitting up and this percentage is 20 percent more than that of the women living in rural areas. Percentage of the employee women who consider “unfaithful behavior” important is about 9 percent lower than that of their counterparts who have different jobs. Ethnically, about 48 percent of the Bulgarian women think that “unfaithful behavior” is a sufficient reason for splitting up and this figure falls to 24 percent for the Turkish women living in the country.

CHAPTER X.WOMEN'S ATTITUDES TO MARRIAGE AND FAMILY UNIONBY THREE DETERMINING FACTORS:BIRTH COHORTS, MARITAL STATUS AND EDUCATION

The FFS data include a question which measures the opinions of the women about "marriage", "single parent" and "family life": "*Do you tend to agree or disagree with each of the following statements"* (Appendix 1) and as understood, this question has three options:

a) Marriage is an outdated institution
b) If a woman wants to have a child as a single parent and she does not want to have a stable relationship with a man, she should be able to have the child.
c) It would be a good thing if in the future more emphasis was placed on family life.

This chapter presents descriptive commentaries of these options by births cohorts, marital status and educational level of the respondents. Thus, it aims to evaluate the women's general attitudes to the marriage and new-developing family forms in the country and, have an idea about the general tendency among the women living in post-transition Bulgaria to build a family in the future.

X. 1.a. Opinion of the women about marriage by birth cohorts

The first option is "Marriage is an outdated institution" and about 78 percent of all women indicate that they don't agree with this opinion. However, while the factors determining their opinions according to some women's basic characteristics such as birth cohorts, marital status and educational level are revised by benefiting from the descriptive methods, it is also possible to estimate the general opinion of the women about marriage in the future.

Table X.1.a.1. Opinion of the women regarding whether "marriage is an outdated institution" classified by birth cohorts, FFS-Bulgaria, 1997

Birth cohorts	Marriage is an outdated institution	Marriage is not an outdated institution	Total
-1960			
Number	139	644	783
Expected number	171	612	783
Percentage	17.8	82.2	100
Standardized residual	-2.5	1.3	
1961-1970			
Number	192	673	865
Expected number	189	676	865
Percentage	22.2	77.8	100
Standardized residual	0.2	-0.1	
1971-1980			
Number	168	464	632
Expected number	138	494	632
Percentage	26.6	73.4	100
Standardized residual	2.5	-1.3	
Total			
Number	499	1781	2280
Percent of total	21.9	78.1	100
Chi-Square Tests	**Value**	**df**	**Sig. (2-sided)**
Pearson Chi-Square	16.028	2	0.000
Likelihood Ratio	16.049	2	0.000
N	2280		

*Correlation is significant at 0,05 level

Table X.1.a.1 suggests that the women's attitudes to marriage are differentiated by the birth cohorts ($p<0,05$).

First of all, the percentages referring to the belief of "the marriage is not an outdated institution" increases across age. Totally 78 percent of the respondents reject the opinion of "marriage is an outdated institution" and so therefore, marital union is still the most acceptable behavior in post-transition Bulgaria.

Eighty-two percent of the women born in 1960 and before indicated that marriage is not an outdated institution. The observed number of the women who

agree with this opinion is higher than the expected. All over again the general tendency is in favor of the importance of marriage (St.R1960oi=-2,5 and St.R1960noi=1,3).

For the younger cohorts, the situation is a bit different. Although about 78 percent of the women born between 1961 and 1970 indicate that “marriage is not an outdated institution” and the observed number is low. The observed number of those who say that “marriage is an outdated institution” is higher than the expected. Probably, women’s confidence to marriage also slowly decreases. Indeed, the difference between the observed and the expected numbers of the youngest cohort group, which is in favor of the negative form of this opinion, supports this consequence (St.R1971-1980oi=2,5).

X. 1.b. Opinion of the women about marriage by marital status, FFS-Bulgaria, 1997

Table X.1.b.1 shows the descriptive commentary of the relation between the opinion of "marriage is an outdated institution", and its assertion is that the attitudes to marriage are differentiated by marital status ($p<0,05$).

Table X.1.b.1. Opinion of the women regarding whether "marriage is an outdated institution" classified by marital status, FFS-Bulgaria, 1997

Marital status	Marriage is an outdated institution	Marriage is not an outdated institution	Total
Single women			
Number	170	288	458
Expected number	100	358	458
Percentage	37.1	62.9	100
Standardized residual	7.0	-3.7	
Married women			
Number	263	1437	1700
Expected number	372	1328	1700
Percentage	15.5	84.5	100
Standardized residual	-5.6	3.0	
Previously married women			
Number	77	98	175
Expected number	38	137	175
Percentage	44.0	56.0	100
Standardized residual	6.3	-3.3	
Total			
Number	510	1823	2333
Percent of total	21.9	78.1	100
Chi-Square Tests	**Value**	**df**	**Sig. (2-sided)**
Pearson Chi-Square	153.2	2	0.000
Likelihood Ratio	141.3	2	0.000
N	2333		

*Correlation is significant at 0,05 level

Overall the single and previously married women (37 percent, 44 percent respectively) have some anxieties regarding the marriage institution even if most of them state the opposite of that.

The observed number of the single women who agree with the opinion of "marriage is an outdated institution" is higher than the expected; inversely, the observed number of single women who agree with the opposite of that idea is fewer than the expected. Moreover, the tendency of defining marriage as an outdated institution is very strong ($St.R.S_{oi}$=7,0).

Almost 85 percent of the married women indicates that marriage is not an outdated institution and tendency of believing in this idea is strong ($St.R.M_{noi}$=3,0). The observed number of the married women who claims the opposite idea is fewer than the expected and supposedly, they are not going to change their idea in the near future ($St.R.M_{oi}$=-5,6).

As for previously married women, as expected, they have negative reaction to the marriage institution. More than half of the women state that marriage is not an outdated institution, but the expected number is to some extent higher than the observed and the obtained difference indicate that previously married women do not believe in the importance of marriage and most probably, they are not going to give up thinking that ($St.R.PM_{oi}$=6,3).

X. 1.c. The opinion of the women about marriage by educational level, FFS-Bulgaria, 1997

Table X.1.c.1 indicates that women's attitudes to marriage institution is differentiated by the educational level of the women ($p<0,05$).

Table X.1.c.1. Opinion of the women regarding whether "marriage is an outdated institution" classified by educational level, FFS-Bulgaria, 1997

Educational level	Marriage is an outdated institution	Marriage is not an outdated institution	Total
Elementary school			
Number	16	40	56
Expected number	12	44	56
Percent	28.6	71.4	100
Standardized residual	1.0	-0.6	
Primary school			
Number	38	223	261
Expected number	57	204	261
Percent	14.6	85.4	100
Standardized residual	-2.6	1.4	
Secondary school			
Number	289	1081	1370
Expected number	302	1068	1370
Percent	21.1	78.9	100
Standardized residual	-0.7	0.4	
Higher			
Number	171	477	648
Expected number	143	505	648
Percent	26.4	73.6	100
Standardized residual	2.4	-1.3	
Total			
Number	514	1821	2335
Percent of total	22.0	78.0	100
Chi-Square Tests	**Value**	**df**	**Sig. (2-sided)**
Pearson Chi-Square	17.75	3	0.000
Likelihood Ratio	18.21	3	0.000
N	2335		

*Correlation is significant at 0,05 level

71 percent of the women who have graduated from the elementary schools indicate that marriage is not an outdated institution. However, the expected number is higher than the observed. But the difference is not enough to say that it is significant. The remaining 29 percent claims that marriage is an outdated institution and their observed numbers are higher than the expected numbers. The difference refers to the tendency which is not in favor of marriage but not very strong ($St.RE_{oi}$=1,0)

The graduates of primary school are closer to the idea of marriage. 85 percent of them believe that marriage is not an outdated institution. Number of the observed values of the women graduated from the primary schools and thinking marriage as an outdated institution is less than the expected. Seemingly they won't change their attitudes in the near future ($St.RP_{oi}$=-2,6). On the one hand, the proportion of the graduates of secondary school who believe that marriage is not an outdated institution is fewer than ones graduated from the primary school (about 79 percent) and number of the observed values is a few more than the expected. On the other hand, the observed value of the graduates of secondary school, which indicate that marriage is an outdated institution (21 percent), is less than the expected. The tendency of the women having secondary education is not absolute enough. But, if the higher percentage of the women who say that marriage is not outdated is taken into consideration, it should be considered that their attitudes to marriage are not pessimistic.

As for the women having higher education, the proportion of the women who consider that marriage is an outdated institution is close to the thoughts of the women graduated from the elementary schools (26 percent). The tendency of considering marriage as an outdated institution is strong ($St.RH_{oi}$=2,4). At the same time, the observed number of the women with higher education and who believe in the importance of the marriage is lower than the expected. But it is not absolute that their positive approach is kept in the future (StR_{noi}=-1,3).

X. 2. a. Attitudes of the women to being a "single-parent" classified by birth cohorts

The second option measures the attitudes of women to one of the gradually developing family forms in the country, particularly appearing after 1990: Single-parent.

Table X.2.a.1. Attitudes of the women regarding being a single parent classified by birth cohorts, FFS-Bulgaria, 1997

	If a woman wants to have a child as a single-parent and she does not want to have a stable relationship with a man.		
Birth cohorts	**she should be able to have the child**	**she should not be able to have the child**	**Total**
-1960			
Observed number	518	263	781
Expected number	543	238	781
Percentage	66.3	33.7	100
Standardized residual	-1.1	1.6	
1961-1970			
Observed number	607	256	863
Expected number	599	264	863
Percentage	70	30	100
Standardized residual	0.3	-0.5	
1971-1980			
Observed number	456	176	632
Expected number	439	193	632
Percentage	72.2	27.8	100
Standardized residual	0.8	-1.2	
Total			
Number	1581	695	2276
Percent of total	69.5	30.5	100
Chi-Square Tests	**Value**	**df**	**Sig. (2-sided)**
Pearson Chi-Square	6.09	2	0.048
Likelihood Ratio	6.06	2	0.048
N	2276		

*Correlation is significant at 0,05 level

Table X.2.a.1 signifies that the opinion “if a woman wants to have a child as a single-parent and she does not want to have a stable relationship with a man, she should (not) be able to have the child” is differentiated by the birth cohorts ($p<0,05$).

The negative approach to the idea of the “single-parenting” decreases from the older birth cohorts to the younger ones.

The observed number of the oldest cohort defending the opinion that “if a woman wants to have a child as a single-parent and she does not want to have a stable relationship with a man, she should not be able to have the child” is higher than the expected. Seemingly they have more conservative attitudes against the single-parenting ($St.R1960_{shouldnot}=1,6$). In fact, 66 percent refer to defenders of the opposite of this idea is the lowest proportion in the table. So, probably, the older cohorts approve the marriage institution when the issue is a child.

Seventy percent of the women born between 1961 and 1970 indicate that if a woman wants to have a child as a single-parent she should be able to have the child and the high observed number also supports this manner.

The women born between 1971 and 1980 represent the most moderate group according to the others. 72 percent says that persons who want to have a child do not have to marry or have a stable relationship with a man. The observed value is higher than the expected, but the tendency is not very strong ($StR1971\text{-}1980_{should}=0,8$)

X. 2. b. Attitudes of the women to being a "single-parent" classified by "marital status

Table X.2.b.1 rests on the relation between the attitude of women to being a "single parent" and marital status. This opinion differentiates in accordance with the marital status of the women ($p<0,05$).

Table X.2.b.1. Attitudes of the women to being a "single-parent" classified by marital status, FFS-Bulgaria, 1997

	If a woman wants to have a child as a single-parent and she does not want to have a stable relationship with a man.		
Marital status	**she should be able to have the child**	**she should not be able to have the child**	**Total**
Single women			
Observed number	344	113	457
Expected number	316	141	457
Percentage	75.3	24.7	100
Standardized residual	1.6	-2.4	
Married women			
Observed number	1122	574	1696
Expected number	1172	524	1696
Percentage	66.2	33.8	100
Standardized residual	-1.5	2.2	
Previously married women			
Observed number	143	32	175
Expected number	121	54	175
Percentage	81.7	18.3	100
Standardized residual	2.0	-3.0	
Total			
Number	1609	719	2328
Percent of total	69.1	30.9	100
Chi-Square Tests	**Value**	**df**	**Sig. (2-sided)**
Pearson Chi-Square	28.09	2	0.000
Likelihood Ratio	29.65	2	0.000
N	2328		

*Correlation is significant at 0,05 level

Seventy five percent of the single women think that if a woman wants to be a single-parent, she can have the child and the high observed number supports that. Both the percentage (about 25 percent) and the observed value of the defenders of the opposite of this idea are lower. The general thought is that a woman can have the child, neither marriage nor a stable relationship is necessary to realize that ($StRS_{should}$=1,6 and $StRS_{shouldnot}$=-2,4)

The proportion of the married women who think that if a woman wants to have a child as a single-parent she should be able to have the child, is the lowest value in three groups (66 percent) but the observed number of the women who agree with this opinion is fewer than the expected, and probably, they continue to think that in the future ($StRS_{should}$=-1,5). However, the defenders of the opposite idea have higher observed number and their reaction to the idea of "single-parent" is stronger ($StRM_{shouldnot}$=2,2) than the other group.

The percentage of the previously married women who indicates that if a woman wants to have a child as a single-parent and she does not want to have a stable relationship with a man, she should be able to have the child is about 82 percent and the expected value is lower than the observed. The general tendency supports this attitude ($StRPM_{should}$ =2,0).

X. 2. c. Attitudes of the women to being a "single-parent" classified by educational level

Table X.2. c. 1. Attitudes of the women to being a "single-parent" classified by educational level, FFS-Bulgaria, 1997

	If a woman wants to have a child as a single-parent and she does not want to have a stable relationship with a man.		
Education	**she should be able to have the child**	**she should not be able to have the child**	**Total**
Elementary school			
Number	30	26	56
Expected number	39	17	56
Percentage	53.6	46.4	100
Standardized residual	-1.4	2.1	
Primary school			
Number	148	114	262
Expected number	181	81	262
Percentage	56.5	43.5	100
Standardized residual	-2.5	3.7	
Secondary school			
Number	952	419	1371
Expected number	947	424	1371
Percentage	69.4	30.6	100
Standardized residual	0.2	-0.2	
Higher			
Number	480	162	642
Expected number	443	199	642
Percentage	74.8	25.2	100
Standardized residual	1.7	-2.6	
Total			
Number	1610	721	2331
Percent of total	69.1	30.9	100
Chi-Square Tests	**Value**	**df**	**Sig. (2-sided)**
Pearson Chi-Square	35.5	3	0.000
Likelihood Ratio	34.4	3	0.000
N	2331		

*Correlation is significant at 0,05 level

Table X.2.c.1 points the relation between the opinion of “If a woman wants to have a child as a single-parent and she does not want to have a stable relationship with a man, she should (not) be able to have the child” and level of education. It suggests that this opinion is differentiated by the level of education of the women ($p<0,05$).

When the educational level increases, the percentage of the women who have affirmative thoughts on this approach that an unmarried woman can have children and become a single-parent also increases. 54 percent of the graduates of primary school, about 57 percent of the graduates of primary school, 69 percent of the secondary school and approximately 75 percent of the higher schools indicate that a woman can have the child under the discussed conditions. However, even if the proportions of the women defending the opposite idea are fewer, the negative tendency reflecting from the numbers is stronger. The observed number of the graduates of the elementary and primary schools, who defend “she should not be able to have the child”, are more than the expected, which is the opposite of the graduates of secondary school and higher.

General tendency of the women who are low-educated is not in favor of to the thought of the “single-parenting” ($St.RE_{shouldnot}=2,1$ and $St.RP_{shouldnot}=3,7$), however, the women having higher education certainly encourage their counterparts with respect to single-parenting ($St.RH_{should}=1,7$ and $St.RH_{shouldnot}=-2,6$) Indeed, the graduates of secondary school have not an easily definable tendency.

X.3. a. The women's outlook for the family life by birth cohorts

Table X.3.a.1 shows the relation between the opinion of "If in the future, more emphasis was placed on family life, it would (not) be good thing" and birth cohorts and it suggests that this opinion is differentiated by the birth cohorts of the women ($p<0,05$).

Table X.3.a.1. Opinion of the women regarding the importance of family life in the future classified by birth cohorts, FFS-Bulgaria, 1997

	If in the future more emphasis was placed on family life.		
Birth cohorts	**it would be good thing**	**it would not be good thing**	**Total**
-1960			
Number	601	180	781
Expected number	555	226	781
Percentage	77.0	23.0	100
Standardized residual	1.9	-3.1	
1961-1970			
Number	608	253	861
Expected number	612	249	861
Percentage	70.6	29.4	100
Standardized residual	-0.2	0.3	
1971-1980			
Number	406	224	630
Expected number	448	182	630
Percentage	64.4	35.6	100
Standardized residual	-2.0	3.1	
Total			
Number	1615	657	2272
Percent of total	71.1	28.9	100
Chi-Square Tests	**Value**	**df**	**Sig. (2-sided)**
Pearson Chi-Square	26.7	2	0.000
Likelihood Ratio	26.8	2	0.000
N	2272		

*Correlation is significant at 0,05 level

The desire of maintaining family institution and considering it important in the future increases across age. Seventy seven percent of the oldest women state that "there should be more emphasis on family in the future", while the proportion of the youngest women sharing the same opinion is 65 percent. The observed number of the oldest cohort is higher than the expected and moreover, the desire of them reflects a significant tendency with respect to the future of family ($StR\text{-}1960_{good}$=1,9).

Seventy percent of the members of second cohort (1961-1970) say that "it would be good thing" but the observed number is not higher than the expected and the tendency likely points out the opposite direction but it is not significant. In addition, observed number of the women considering that "an emphasis on the family institution in the future is not necessary" is higher than the expected ($St.R1961\text{-}1970_{good}$=-0,2 and $StR1961\text{-}1970_{notgood}$=0,3).

The general view of the youngest cohort regarding family is exact. The observed number of the women who do not consider that family needs an emphasis in the future is fewer than the expected and the tendency of keeping this attitude is significant and strong ($StR1971\text{-}1980_{good}$=-2,0). At the same time, the observed number of the women defending the opinion that "it would not be good thing" is considerably higher than the expected and the tendency is remarkably strong ($StR1971\text{-}1980_{notgood}$=3,0). So, for the members of the youngest cohort, it is not necessary to be placed on more emphasis on family in the future.

X.3. b. The women's outlook for the family life by marital status

Table X.3.b.1. suggests that the opinion of "more emphasis on family life in the future" is differentiated by marital status of the women ($p<0,05$)

Table X.3.b. 1. Opinion of the women regarding the importance of family life in the future classified by marital status, FFS-Bulgaria, 1997

	If in the future more emphasis was placed on family life.		
Marital status	**it would be good thing**	**it would not be good thing**	**Total**
Single women			
Number	170	288	458
Expected number	100	358	458
Percentage	37.1	62.9	100
Standardized residual	7.0	-3.7	
Married women			
Number	263	1437	1700
Expected number	372	1328	1700
Percentage	15.5	84.5	100
Standardized residual	-5.6	3.0	
Previously married women			
Number	77	98	175
Expected number	38	137	175
Percentage	44.0	56.0	100
Standardized residual	6.3	-3.3	
Total			
Number	510	1823	2333
Percent of total	21.9	78.1	100
Chi-Square Tests	**Value**	**df**	**Sig. (2-sided)**
Pearson Chi-Square	153.3	2	0.000
Likelihood Ratio	141.4	2	0.000
N	2333		

*Correlation is significant at 0,05 level

About 63 percent of the single women think that family does not need an emphasis in the future. However, the observed number of these women is remarkably fewer than the expected. Inversely, in spite of the low percentage, number of the observed women who indicate that family needs more emphasis in the future is

higher than the expected, moreover, the tendency of keeping family alive in the future is significant and considerably strong ($StRS_{good}$=7,0)

The proportion of the married women who suggest that “if in the future, more emphasis was placed on family life, it would not be good thing” is about 85 percent and their expressions are significant and notable. Because the observed number of married women who think that family does not need more emphasis in the following years is quite high and the statistical difference between the observed and the expected refers to a strong tendency ($StRM_{notgood}$=3,0). The observed number of the defenders of the opposite opinion is remarkably lower, that is to say, even 263 married women are in favor of keeping the family institution, this figure is less than the expected and the tendency is strongly pessimistic ($StRM_{good}$=-5,6).

The proportion of the previously married women defending the opinion that “if more emphasis was placed on family life in the future, it would be good thing” is 44 percent and this figure is lower than the percentage of the women who defend opposite opinion. On the one hand, 44 percent of the previously married women show a tendency of keeping family institution alive in the future ($StRPM_{good}$=6,3). On the other hand, observed number of the 56 percent of this group of women is considerably lower than the expected and the tendency is in favor of the opinion that family does not need more emphasis in the future ($St.RPM_{notgood}$=-3,3). In other words, more than half of the previously married women, most likely, will continue to think that in the following years.

X.3. c. The women's outlook for the family life by educational level

Table X.3.c.1. Opinion of the women regarding the importance of family life in the future classified by educational level, FFS-Bulgaria, 1997

	If in the future more emphasis was placed on family life.		
Education	**it would be good thing**	**it would not be good thing**	**Total**
Elementary school			
Number	36	19	55
Expected number	39	16	55
Percent	65.5	34.5	100
Standardized residual	-0.5	0.7	
Primary school			
Number	179	82	261
Expected number	185	76	261
Percent	68.6	31.4	100
Standardized residual	-0.4	0.6	
Secondary school			
Number	979	390	1369
Expected number	968	401	1369
Percent	71.5	28.5	100
Standardized residual	0.3	-0.5	
Higher			
Number	452	190	642
Expected number	454	188	642
Percent	70.4	29.6	100
Standardized residual	-0.1	0.2	
Total			
Number	1615	657	2272
Percent of total	71.1	28.9	100
Chi-Square Tests	**Value**	**df**	**Sig. (2-sided)**
Pearson Chi-Square	1.76	3	0.624
Likelihood Ratio	1.73	3	0.631
N of Valid Cases	2272		

*Correlation is significant at 0,05 level

Table X.3.c.1. is constituted to examine the significant differences between the opinion of "If in the future, more emphasis was placed on family life, it would (not) be good thing" and educational level of the women. However, according to the

results, the differences are not statistically significant (P>0,05), so, the expected relation between the variables can not be found.

CHAPTER XI.THE MULTIVARIATE ANALYSIS: RESULTS OF THE APPLICATIONS OF STEPWISE LOGISTIC REGRESSION ON THE INTENTION TO HAVE A(NOTHER) CHILD

This study includes five regression models. Each of them presents a statistical evaluation which is constituted on the women's intentions to have a(nother) child. The stepwise logistic regression model is employed to observe the effects of basic demographic characteristics, partner's characteristics and recent thoughts of the women about parental responsibilities and partnership on the dependent variables.

Basically, the "intentions" are evaluated in terms of four groups of dependent variable[30]:

a. Intention to have first child,
b. Intention to have a second child,
c. Intention to have a third child,
d. Intention to have a(nother) child.

As mentioned before, in most cases, observation numbers into the data are too low and using lots of variables does not provide statistically reliable and easily interpreted results. So, during the analysis the researcher is obliged to do significant selections. On this account, firstly, eight available and important variables, which reflect basic demographic characteristics of the respondents, are selected in order to increase the reliability of the operation and measure the women's intentions to have first/a second/ a third child.

a. Birth cohorts,
b. Marital status
c. Residence
d. Employment status[31]

[30] Look "Chapter 8: Methodology" for the definitions of the dependent variables.

e. Religiousness of the respondent

f. Household size[32]

g. Ethnic status

h. Educational level[33]

Secondly, the data of FFS-Bulgaria include a small number of characteristics of the partner/husband. This study uses four variables:

a. Level of education of partner/husband

b. Children wish of partner/husband

c. Employment status of partner/husband

d. Religiousness of partner/husband

Thirdly, two categories of statements are included in the regressions: The category of "parental responsibilities" accounts for two opposite statements and the second has four different statements which are specially related with the choices of the women between the occupational expectations and partnership.

[31] The "employment status" variable is used instead of the variable which is related with the working situation of the women. Because the latter can not work out the operation to the explanatory results.
[32] Household groups are categorized into three groups for logistic regression.
[33] The education groups are revised for the operation. Due to too low case numbers of the graduates of elementary and primary schools, these are connected.

XI. 1. INTENTION TO HAVE FIRST CHILD

Table XI.1.1. Results of stepwise logistic regression for the effects of basic demographic characteristics of the respondents on the intention to have first child, FFS-Bulgaria, 1997

Variables	B	S.E.	Wald	Significance	Odds[Exp(B)]
Birth cohorts					
-1960					1.000
1961-1970	1.607	0.462	12.108	0.001	4.987**
1971-1980	-0.468	0.509	0.843	0.358	0.626
Marital status					
single					1.000
married	0.721	0.423	2.904	0.088	2.056
previously married	2.137	0.727	8.637	0.003	8.478**
Residence					
rural					1.000
urban	-0.794	0.322	5.725	0.017	0.452*
Sofia	-2.187	0.656	11.097	0.001	0.112**
Employment status					
employee	-1.631	0.787	4.300	0.033	0.187*
other employment status					1.000
Religiousness					
Yes					1.000
No	-1.246	0.374	11.092	0.001	0.288**
Household size					
1-2	-1.070	0.438	5.960	0.015	0.343*
3-4	-2.063	0.354	34.005	0.000	0.127**
5+					1.000
Ethnic status	**NiE**				
bulgarian	(-)	(-)	(-)	(-)	(-)
turk	(-)	(-)	(-)	(-)	(-)
gypsy	(-)	(-)	(-)	(-)	(-)
Level of education	**NiE**				
elementary/primary school	(-)	(-)	(-)	(-)	(-)
secondary school	(-)	(-)	(-)	(-)	(-)
higher	(-)	(-)	(-)	(-)	(-)

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).
NiE: not in the equation

Table XI.1.1 shows the effects of the eight basic characteristics of the women on the intention to have first child.

As regards birth cohorts, it is observed that the women born in 1961-1970 are 5 times more likely to express an intention to have first child than the women born in 1960 and before. Being previously married seems more effective on having first child than being currently married. The previously married women are 8.5 times more likely to express an intention to have first child than the single women. It is the unexpected result that becoming married has not a significant effect on having first child. Actually in spite of the fact that marriage traditionally is an important fact in post-transition Bulgaria, marriage is continued as not necessary to have a child. However, some researches present that the single women who want to have a child or who get unintentionally pregnant during a non-marital cohabitation, mostly want to get married with the partner. Such an intention is only current for the first child. It should be considered that probably most of the previously married women do not have children (or have one but want another) and want to have a child in the near future. The likelihood of having first child is almost about 2 times fewer among the women living the urban and 9 times fewer among the women living in Sofia in comparison to their counterparts living in the rural areas. The employee women are about 5 times less likely to express an intention to have first child than their counterparts who have different jobs. As to religiousness of the respondents, the women indicating that they are not religious are about 3 times less likely to express an intention to have first child than ones who have more religious. The women living in the households with one or two members are 3 times and living in the households with three or four members are about 8 times less likely to express an intention to have first child than the women living in the household with five or more members. At that point, it should be remembered that most of the women in their reproductive age do not live alone; otherwise, they share their houses with their relatives, parents, partners or anyone who has engaged in their life.

Any significant effect of the ethnic characteristics of the women and their educational levels on the intention to have first child has not been observed.

XI. 2. INTENTION TO HAVE A SECOND CHILD

Table XI.2.1. Results of stepwise logistic regression for the effects of basic demographic characteristics of the respondents on the intention to have a second child, FFS-Bulgaria, 1997

Variables	B	S.E.	Wald	Significance	Odds[Exp(B)]
Birth cohorts					
-1960					1.000
1961-1970	-1.168	0.297	15.482	0.000	.311**
1971-1980	-2.479	0.391	40.119	0.000	.084**
Marital status					
single					1.000
married	0.987	0.433	5.195	0.023	2.682*
previously married	1.091	.509	4.585	0.032	2.976*
Residence	**NiE**				
rural	(-)	(-)	(-)	(-)	(-)
urban	(-)	(-)	(-)	(-)	(-)
Sofia	(-)	(-)	(-)	(-)	(-)
Employment status					
employee	0.887	0.426	4.344	0.037	2.428*
other employment status					1.000
Religiousness	**NiE**				
Yes	(-)	(-)	(-)	(-)	(-)
No	(-)	(-)	(-)	(-)	(-)
Household size	**NiE**				
1-2	(-)	(-)	(-)	(-)	(-)
3-4	(-)	(-)	(-)	(-)	(-)
5+	(-)	(-)	(-)	(-)	(-)
Ethnic status					
bulgarian					1.000
turk	-1.445	0.729	3.925	0.048	0.236*
gypsy	-1.469	1.252	1.375	0.241	0.230
Level of education	**NiE**				
elementary/primary school	(-)	(-)	(-)	(-)	(-)
secondary school	(-)	(-)	(-)	(-)	(-)
higher	(-)	(-)	(-)	(-)	(-)

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).
NiE: not in the equation

Table XI.2.1 points out the effects of basic background characteristics of the women on the intention to have a second child.

The women born between 1961 and 1970 are about 3 times and ones born between 1971 and 1980 are 12 times less likely to express an intention to have a second child than their counterparts born in 1960 and before. The married women are about 3 (exact 2.6) times and the previously married women are about 3 (exact 2.9) times more likely to express an intention to have a second child than the single women. It is observed that the employee women are 2 (exact 2.4) times more likely to express an intention to have a second child than the women working in the other employment areas. With regard to ethnic status, the likelihood of expressing an intention to have a second child for the Turkish women decreases 4 times as that of the Bulgarian women. However, as for the Gypsy women, there is no significant difference from Bulgarian women. The low case number of the women who are not Bulgarian should be taken into account while these results are interpreted. For the reason that such a result does not reflect the truth of the country. Gypsy women are known as the most fertile social group concerning reproductive behavior in the country and it is expected that risk of being a second children for these women is higher than the women coming from the other ethnic groups. Likewise Koytcheva (2006) finds *significant differences in childbearing behavior for women coming from the Roma* (Gypsy) *ethnic group* and according to her study the *Roma group starts earliest with the second birth*.

"Types of place of residence", "religiousness of the respondent", "household size" and "educational level" are the variables which are not included to the model by the logistic regression method.

XI. 3. INTENTION TO HAVE A THIRD CHILD

Table XI.3.1. Results of stepwise logistic regression for the effects of basic demographic characteristics of the respondents on the intention to have a third child, FFS-Bulgaria, 1997

Variables	B	S.E.	Wald	Significance	Odds[Exp(B)]
Birth cohorts					
-1960	1.345	0.444	9.187	0.002	3.836**
1961-1970	0.929	0.431	4.645	0.031	2.531*
1971-1980					1.000
Marital status					
single	1.350	1.262	1.145	0.285	3.858
married	1.229	0.418	8.653	0.003	3.419**
previously married					1.000
Residence					
rural	-1.785	0.731	5.960	0.015	0.168*
urban	-1.361	0.638	4.547	0.033	0.256*
Sofia					1.000
Employment status	**NiE**				
employee	(-)	(-)	(-)	(-)	(-)
other employment status	(-)	(-)	(-)	(-)	(-)
Religiousness	**NiE**				
Yes	(-)	(-)	(-)	(-)	(-)
No	(-)	(-)	(-)	(-)	(-)
Household size	**NiE**				
1-2	(-)	(-)	(-)	(-)	(-)
3-4	(-)	(-)	(-)	(-)	(-)
5+	(-)	(-)	(-)	(-)	(-)
Ethnic status					
bulgarian	1.115	0.551	4.085	0.043	3.048*
turk	1.333	0.693	3.699	0.054	3.794
gypsy					1.000
Level of education					
elementar/primary school	0.717	0.480	2.229	0.135	2.049
secondary school	1.155	0.336	11.806	0.001	3.175**
higher					1.000

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).
NiE: not in the equation

Table XI.3.1 includes the effects of the basic demographic characteristics of the women on the intention to have a third child.

The women born in 1960 and before are approximately 4 times and the women born in 1961-1970 are 2.5 times more likely to express an intention to have a third child than the women born in 1971-1980. The married women are 3.5 times more likely to express an intention to have a third child than the single women. It should be remembered that having a third child is a very rare event in the country, however, what are talked about here are the intentions of the women. The likelihood of expressing an intention to have a third child is about 6 times fewer among the rural women and about 4 times fewer among the urban women than the women living in Sofia, the capital city. Unexpectedly, the likelihood of expressing an intention to have a third child for the Bulgarians seems 3 times higher than the Gypsy women. However, the relationship is significant but, the level of significance for the Bulgarians is very close to the statistically defined level of significance ($p<0,05$), and similar situation is current for the Turkish women, the level is nearly significant[34]. These results reflect the similar problem that is met during the analyses on the intention to have a second birth. It is expected that the Turkish and Gypsy women have higher risk of having a third child. So, such a result is not reliable. According to the educational levels, the likelihood of having a third child for the women who have secondary education is 3 times more than the women having higher education.

The variables of "employment status", "religiousness of the respondent", "household size" are left out by the logistic regression model.

[34] While the data is being used to calculate the similar issues such as "intention", "tendency" and the like, the low number of the observations should be taken into account and the significance levels which are "nearly significant" should be interpreted.

XI. 4. PARTNER'S CHARACTERISTICS AND INTENTION TO HAVE A(NOTHER) CHILD

Table XI.4.1. Results of stepwise logistic regression for the effects of partner's characteristics on the intention to have a(nother) child, FFS-Bulgaria, 1997

Variables	B	S.E.	Wald	Significance	Odds[Exp(B)]
Intention to have first child					
Partner's level of education					
elementary/primary school					1.000
secondary school	-1.758	0.484	13.178	0.000	0.172**
higher	-1.204	0.465	6.690	0.010	0.300**
Intention to have a second child					
Partner's level of education					
elementary/primary school					1.000
secondary school	0.489	0.136	12.965	0.000	1.631**
higher	0.506	0.219	5.307	0.021	1.658*
Partner's children wish					
same					1.000
more	0.553	0.355	2.426	0.119	1.739
fewer	-2.698	1.066	6.401	0.011	0.067*
Intention to have a third child					
Partner's level of education					
elementary/primary school					1.000
secondary school	1.077	0.305	12.490	0.000	2.936**
higher	1.486	0.446	11.106	0.001	4.418**
Employment status of partner					
employee	1.187	0.286	17.249	0.000	3.279**
other employment status					1.000
Partner's children wish					
same					1.000
more	0.223	1.073	0.043	0.836	1.249
fewer	-4.803	1.149	17.485	0.000	0.008**
Religiousness of partner					
Yes					1.000
No	0.865	0.320	7.306	0.007	2.375*

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).

Table XI.4.1 examines the effects of the basic characteristics of the partner/husband on the intentions to have first, a second and a third child.

For the first child, the educational level of the partner/husband seems very effective. According to the results, the partner/husband who has graduated from the secondary school is 6 times and ones who have graduated from the higher schools are 3 times less of the intention to have first child according to ones who have graduated from elementary/primary school. The other three are not included by the logistic regression model.

As for the intention to have a second child, educational level of the partner/husband is also a determining factor. Both the graduates of secondary schools and the graduates of higher schools are around 1.6 times more likely to express an intention to have a second child than the partner/husband who has lower education. Another variable affecting the intention to have a second child is the desire for having another child of the partner/husband. The partner/husband who wants fewer children is 15 times less likely to determine the intention to have a second child.

With regard to the intention to have a third child, educational level of the partner/husband is important once more. The graduates of secondary school are 2.9 and the graduates of higher schools are 4.4 times more likely to determine the intention to have a third child. The “children wish” of the partner/husband, which is “fewer”, is 125 times less likely to affect the women’s intention to have a third child. The decision of the non-religious partner is 2 times more likely to influence the intention to have a third child.

XI.5. THE SELECTED STATEMENTS AND INTENTION TO HAVE A(NOTHER) CHILD

Table XI.5.1 Results of stepwise logistic regression for the effects of some selected statements on the intention to have a(nother) child, FFS-Bulgaria, 1997

Statements	Odds [Exp(B)] A child	Odds [Exp(B)] Another child
Parental responsibilities		
It is the parents duty to do their best for their children. even at the expense of their own well -being(1)	1.000	2.273**
Parents have lives of their own and should not be asked to sacrifice their own well-being for the sake of their children(2)	0.795	1.000
Thoughts on partnership		
Having a successful partnership is the most important thing in life to me		
[agree]	1.000	1.000
[disagree]	0.382*	0.752
I work hard to built a good relationship with my partner. even if it means limiting my opportunities to pursue other personal goals		
[agree]	1.000	1.489*
[disagree]	0.281	1.000
It is important to me to have an occupational career where I can achieve something valuable		
[agree]	1.000	1.000
[disagree]	0.144*	1.764**
I make as many sacrifices as necessary to advance in my occupational career		
[agree]	0.169**	2.204**
[disagree]	1.000	1.000

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).

Since the transition in 1989, number of the women who want to be employed and earn a good living has been increasing. In other words, most of the women living in post-transition Bulgaria work and try to set up a new order. As for the remaining, some of them are students and some of them are housewives. Such a social challenge has unintentionally been changing their primary objectives in the life. Particularly, they blow up motherhood out of proportion. Table XI.5.1 is constituted for understanding their thoughts about having a(nother) child and it covers two main groups; namely "Parental responsibilities" and "Thoughts on partnership". Each includes certain statements on the primary objectives and partnership.

The first statement which is one of the "Parental responsibilities" is "It is the parents' duty to do their best for their children, even at the expense their own well-being" and the second is "parents have lives of their own and should not be asked to sacrifice their own well-being for the sake of their children. For the first child, any of these statements were not found effective, however, for another child, the women preferring the first statement 2 times more likely to have another child than the women preferring the second statement.

Within the context of "Thoughts on partnership" there are four statements. The first one is "Having a successful partnership is the most important thing in life to me". The women who disagree with this opinion are 2.5 times less likely to have first child than the women who consider the opposite of that.

The second statement is "I work hard to build a good relationship with my partner, even if it means limiting my opportunities to pursue other personal goals". The women who agree with this opinion are 1.4 times more likely to have a second child than the women who think the opposite of that.

The third statement is "it is important to me to have an occupational career where I can achieve something valuable". The women who disagree with this opinion are 7 times less likely to have first child and 1.7 times more likely to have a second child than the other women who agree with the persons sharing this opinion.

The women agree with the last statement, “I make as many sacrifices as necessary to advance in my occupational career”, are 6 times less likely to have first child and 2.2 times more likely to have a second child than the other group of women who disagree with ones considering the opposite.

CHAPTER XII. RESULST OF THE DECISION TREE ANALYSIS ON THE INTENTION TO HAVE A(NOTHER) CHILD

In the recent years, the decision tree, which is also called classification tree, as an analyzing method has been used by the data mining studies in Turkey (Babadağ, 2003). The classification system of CRT (Classification and Regression Tree) is based on the regression principles. It illustrates the improvement level which is started with the most effective variable on the dependent variable. While the tree is growing, the improvement level increases. In this study, the CRT method is employed in order to enter into details and strengthen the results of logistic regression, by benefiting from the statistical classifications.

XII. 1. INTENTION TO HAVE FIRST CHILD

The model, Figure XII.1.1 accounts for 477 observations. Approximately 89 percent (N=422) of them intend to have first child and approximately 11 percent (N=55) do not. The improvement level[35] is 4 percent.

The Left Node "1960 and before"

It includes just about 10 percent (N=47) of all the respondents who intend to have first child. 53 percent (N=25) of them do not intend to have first child.

Approximately 8 percent (N=37) of the all observations believe in God. 65 percent (N=24) of these religious people do not intend to have first child in comparison with the women who are not religious. 5 percent (N=24) of the religious women have graduated from the secondary schools or below and mostly they have not the desire to have first child.

At that point, it should be remembered that the respondents covered by the right branch of the religious women are 37 years old or more. In post-transition Bulgaria,

[35] Contribution to development of the model (tree)

the women aged 30-35 have already completed their reproductive period and their religiousness do not force them to change their behaviors. On the contrary, most probably, the women having strong believes in God would not have a child because of their worries about the child's future, which is not planned well before.

The Right Node "after 1960"

The node covers 430 observations. 93 percent (N=400) of them intend to have first child.

Eighty-seven percent (N=417) are employees and they are less then 37 years old. Ninety-four percent (N=391) of them intend to have first child. Eighty-six percent (N=412) of them are single or married and 94 percent (N=388) intend to have first child. In this total, the percentage of the single women is 75 (N=358) and 95 percent (N=341) of them indicate that they have the desire to have first child. Approximate 41 percent (N=193) live in the urban areas; almost 35 percent (N=165) live in the rural areas or Sofia. The single women living in the rural areas or Sofia 6 percent more likely to have first child than their counterparts living in the urban areas and 26 percent (N=126) of these rural women live in the households with three or four members (or less) and all intend to have first child. On the other hand, the desire to have first child of the single women living in the urban areas is determined by their ethnic status 92 percent (N=170) of them are Bulgarian. With regard to the married women; almost 10 percent (N=46) live in the urban or Sofia and most of them are more likely to have first child than the women living in the rural areas. The majority believes in God and belief of God positively affects their desire to have a child.

With regard to having first child, the employment status is important factor for the women born in after 1960. The number of the employee women who intend to have first child is higher than the women who have different jobs (the high case number of the employee women in the sample should be taken into account). The

number of the single women who intend to have first child is 7 times more than the number of married or previously married women.

Mostly, single women living in the urban areas have the desire to have first child and they are mostly Bulgarian. The single women having intention to have first child mostly live in the households with three or four members (or less). For the married women having a desire to have first child, types of place of residence and religiousness are the effective factors. The married women living in the urban areas and having religious characteristics have more desire to have first child.

Figure XII. 1. 1. Results of the decision tree analyses for the determinants of intention to have first child, FFS-Bulgaria, 1997

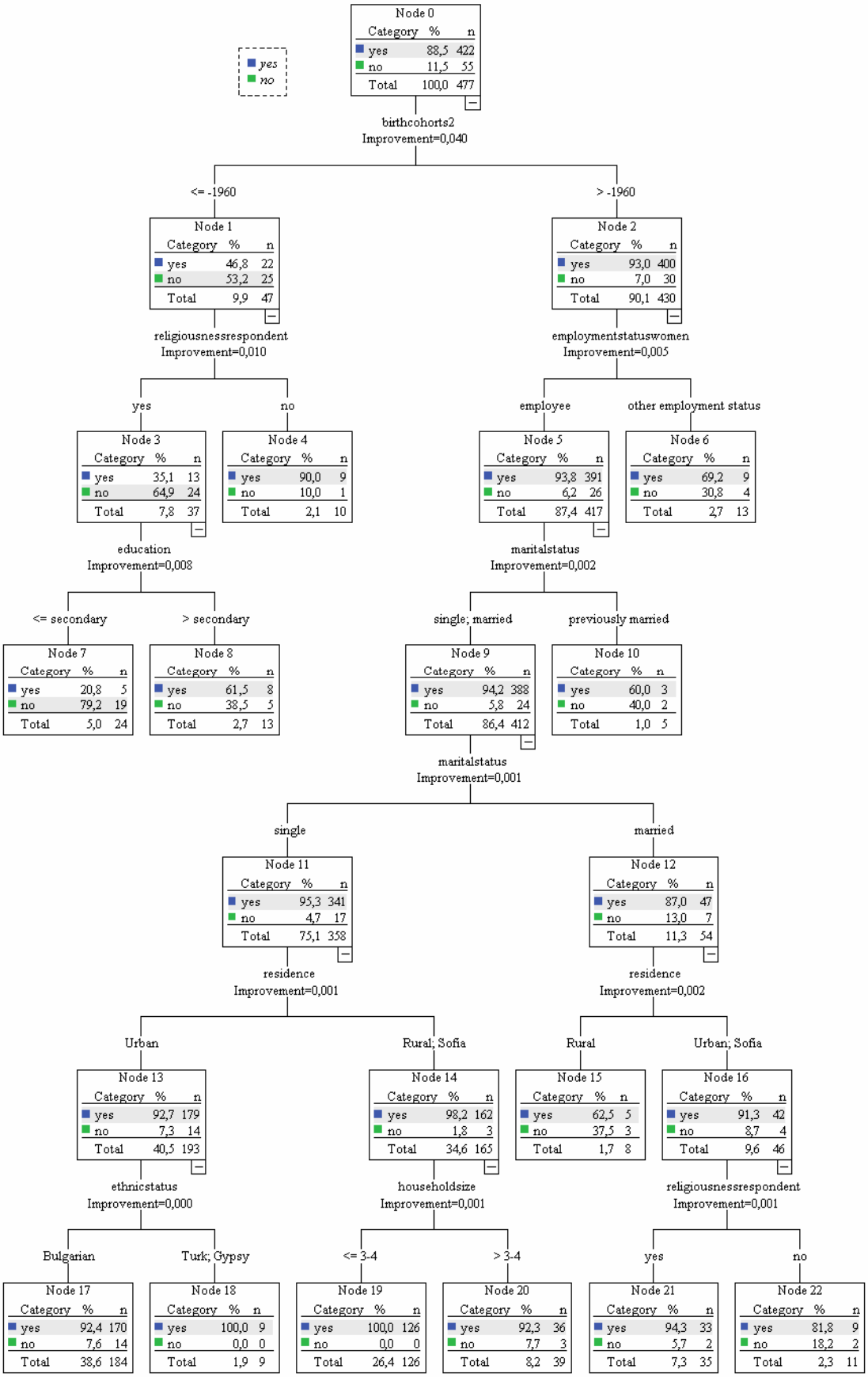


Figure XII.1.1.a. Importance of the variables affecting the model; the intention to have first child, FFS-Bulgaria, 1997

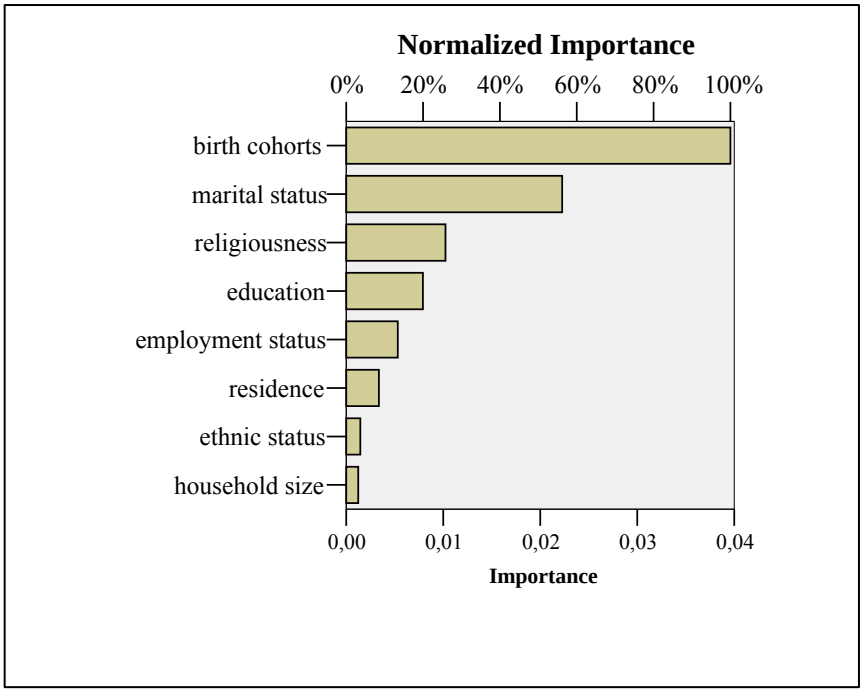


Figure XII.1.1.a presents the level of importance of the variables in the model. In other words, this figure shows the variables affecting the dependent variable in an order. The first one is the most effective variable and the last one is the least effective variable. So, according to the figure, "intention to have first child" is mostly determined by age, that is to say, the birth cohorts. Secondly, marital status is an important factor; probably while the women are wishing to have first child, they take their current marital status into consideration. Religiousness is the third determining factor, although its effect is not very clear in the model, it should be talked about an age limit: For the women who are about their 40s; even if their religiousness is very strong, current age and their future anxieties would be effected on the process of decision-making. Nevertheless, in terms of the younger cohorts, the situation is different, the last leaves of the model point out the religious women born after 1960 more likely to have the desire to have first child. Educational level of the women seems a more effective factor on the intention to have first child for the older cohorts. With regard to younger cohorts, employment status discourages the education. The

variables “residence”, “ethnic status” and “household size” have not a significant effect on the intention to have first child.

XII. 2. INTENTION TO HAVE A SECOND CHILD

According to the first node (Figure XII.1.2.1), the intention to have a second child is also determined by the birth cohorts of the respondents. There are 564 respondents in the model and 63 percent (N=356) indicate that they have not the desire for a second child, 37 percent (N=208) indicate that they have such an intention. In fact, the women who “have no intention of having a second child” dominate on the “tree”, which is the opposite of the previous “tree” on the intention to have first child.

The Left Node “1961 -1970” cohort and before

The women born in 1970 or before account for approximately 75 percent (N=420) of the total women in the primary node and 72 percent (N=304) indicate that they have no intention of having a second child. When the node is divided into two branches by the birth cohorts once more; namely “1960 and before” and “after 1960”, the former accounts for about 30 percent (N=170) and the latter accounts for 44 percent (N=250) of those who born in 1970 or before.

Almost 85 percent of the women in 1970 or before have no intention to have a second child and their attitudes are probably affected by their level of education. The women whose educational levels are higher than the secondary school (11 percent, N= 61) are 9 percent more likely to have a second child than the graduates of secondary school or less. The women who have secondary education or less and born in 1970 or before are totally 19 percent (N=109), 88 percent (N=96) of these women do not wish to have a second child in the near future. This proportion is higher than the proportion of the women who have higher education and sharing the same opinion, that is 78 percent (N=48). Moreover, those who have secondary education or less can be classified into two by the employment status of the women. Approximately 89 percent (N=94) of the employee women point out that they have

not the desire to have a second child. 7 percent (N=40) of these women live in the rural areas and 95 percent (N=38) have not intention to have a second child. This value is 10 percent more than their counterparts living in the urban and also in the capital city.

As for the women whose educational levels are higher than the secondary school, the proportion of the urban women who indicate that they have no intention of having a second child is 83 percent (N=44) and the determining factor of this opinion is the current marital status; 7 percent (N=40) are married or single, 2 percent (N=13) are previously married. Married and single women have not a strong desire to have a second child than the previously married women.

64 percent (N=160) of the women born after 1960 indicate that they have no intention of having a second child and their intentions are differentiated by their ethnic identifications. The Bulgarian and Gypsy women (43 percent, N=240) are not likely to have a second child; 66 percent (N=158) suggest that they have not a desire to have a second child. Their approaches to having a second child change according to their employment status. Because almost 77 percent (N=229) of the group of Bulgarian and Gypsy women are employee and the proportion of the women who have not the desire to have a second child is 67 percent (N=154). Moreover, if they have secondary or less education, approximately 73 percent of them have not intention to have a second child. This proportion is almost 15 percent more than the women having higher education (59 percent, N=57).

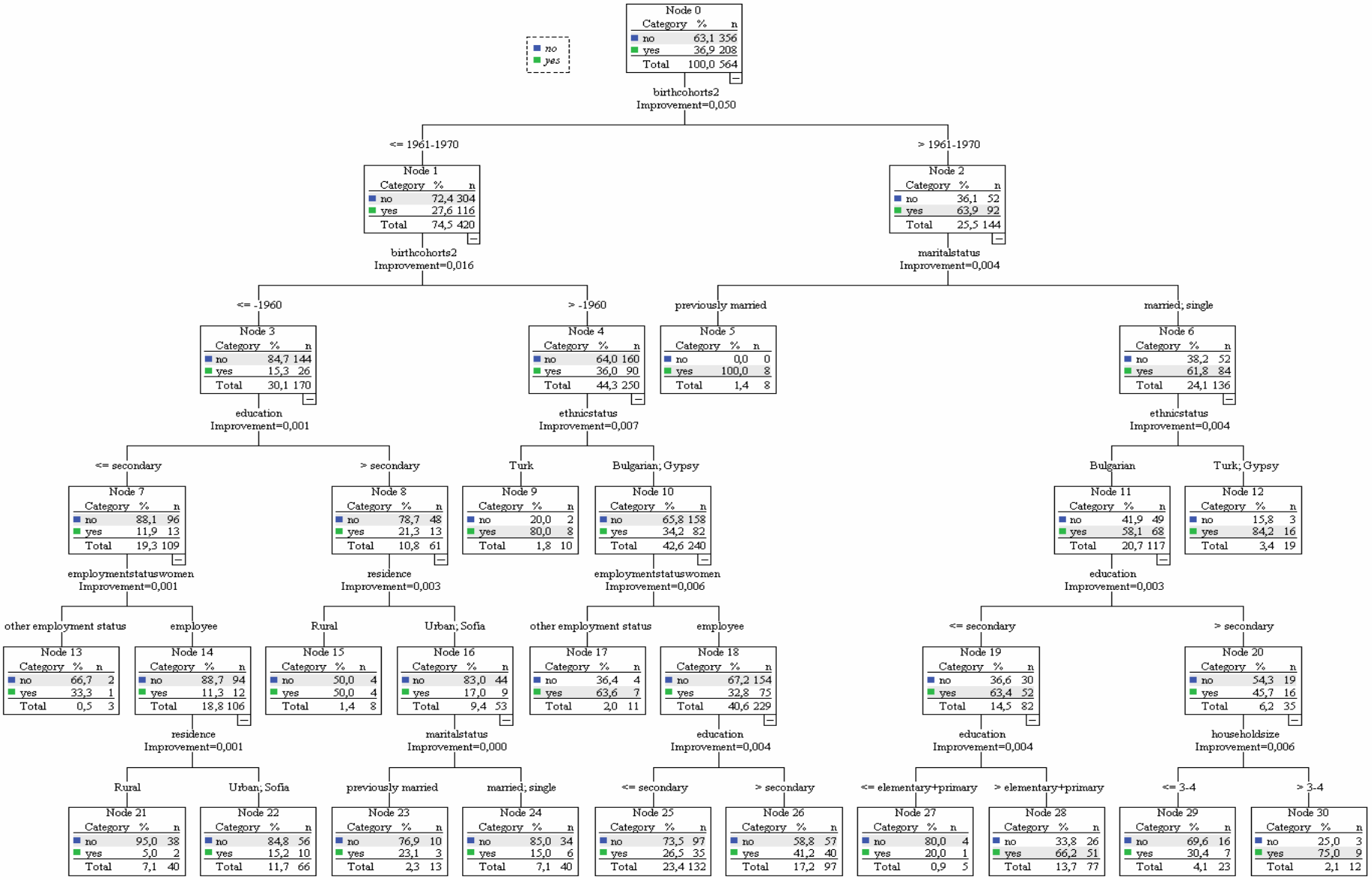
The Right Node "1961-1970 and after"

The women born after 1970 account for about 26 percent (N=144) of the primary node. 64 percent (N=92) have the desire to have a second child.

The current marital status of the women is the first determining factor of the intention to have a second child. Those who are single or married have stronger desire to have a second child (62 percent, N=84). This node is divided into two via

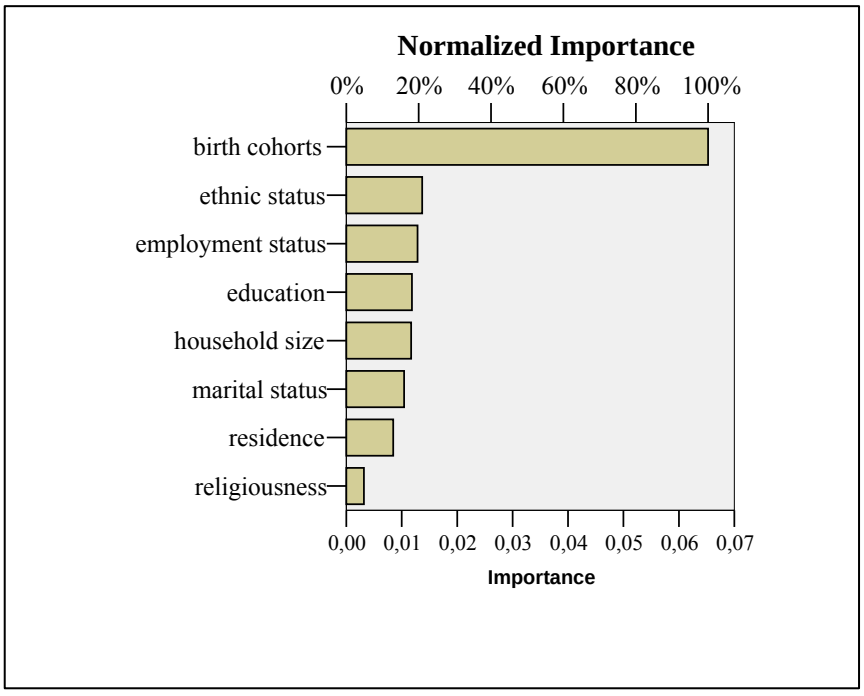
the ethnic characteristics of the respondents: 21 percent of them (N=117), the majority, is Bulgarian, they are 26 percent less likely to have a second child than the Gypsy and Turkish women. The Bulgarian women's intentions can change according to their educational level. The secondary and less educated women are about 18 percent more likely to have a second child than the women who have higher education. For the intentions of the women graduated from secondary school or less, the current degree of this education is important. For example, according to the last leaf regarding Bulgarian women's education, those who are graduated at least from the primary school have a stronger desire to have a second child than their counterparts who are not complete the primary school. On the other hand, for the graduates of secondary school or higher, the household size is more effective factor on the intention to have a second child. The proportion of those who live in the households with four or less members and have not intention to have a second child is higher than the ones living in the households with four or more members.

Figure XII. 1. 2. 1. Results of decision tree analysis for the determinants of intention to have a second child, FFS-Bulgaria, 1997



The first variable, “birth cohorts”, appears as the main determinant of the intention to have a second child. The older cohorts do not more consider having a second child than the next cohorts. For the cohorts in 1970 or before, the variables referring to educational level of women, types of place of residence and household size they live in describe their intentions to have a second child well. However, for the women born after 1970, “marital status”, “ethnic identification”, “education” and “household size” are the distinctive characteristics of the desire to have a second child. Seemingly, the desire to have a second child of the women born after 1970 is determined by marital status first and then ethnic status.

Figure XII.2.1.2. Importance of the variables affecting the model on the intention to have a second child, FFS-Bulgaria, 1997



It should be taken into consideration that the second child is mostly conceived by the women living in a marital cohabitation and previously married women who currently live in a non-marital cohabitation. According to the branches of tree on the second child, the previously married women are not more functional than the married ones. The married and single women are hold together. The Bulgarian (married or

single) women are not as desirous as the Turkish and Gypsy women with regard to having a second child. Moreover, educational level affects also their primary objectives; the Bulgarian women who have secondary education or less are more likely to have a second child in the future than the women than their counterparts having higher education.

Figure XII.2.1.2 also presents the variables that have a contribution to the model on the intention to have a second child in turn. The birth cohorts of the respondents are the primary factors affecting the intention. Secondly, it changes according to the ethnic characteristics of the women and then thirdly employment status follows it. Marital status is lost its importance after the first child. The variables; "household size" that women live in, the "usual residence" and the "religiousness", have not the meaningful effects on the desire to have a second child as strong as the others have.

XII. 3. INTENTION TO HAVE A THIRD CHILD

While the classifications presented by the model (Figure XII.3.1.1) are interpreted, it should be kept in mind that the third child is an uncommon event in the country for a long time. The primary node includes 815 observations and 91 percent (N=744) of them mention that they have not intention to have a third child. The primary node has two branches by the birth cohorts.

The left node "1961-1970 and before"

The left node refers to "1970 and before" and constitutes 92 percent (N=751) of the primary node. 93 percent (N=695) of the women born in 1970 or before have not the desire to have a third child. The types of residence influence that attitude and those who live in both types of place of residence, in the urban and rural areas, the proportion of the women who have not intention to have a third child is 92 percent (N=642), while all the women living in Sofia share the same opinion. The educational level also determines these women's approaches; the percentage of the women having secondary education or less and having not the desire for a third child

is 93 percent (N=489) while the percentage of ones having higher education and having not the desire for a third child is lower; 88 percent (N=153). The node covered the women who have secondary education and less is divided into two branches, by the types of place of residence again; the rural women who have secondary education or less and who have not intention to have a third child is 3 percent less than the urban women. The proportion of the Bulgarian women living in rural areas is 7 percent more likely to have a third child than their Turkish and Gypsy counterparts. On the other hand, the employment status is more effective on the attitudes of the women who have higher education, in particular, approximately 88 percent (N=143) of the employee women do not wish to have a third child. Most of the employee women live in the urban areas and 86 percent (N=127) of them have not the desire to have a third child.

The right node "1961-1970 and later"

The right node covers just 64 observations. Almost 77 percent (N=49) of the respondents indicate that they have not intention to have a third child. The node is divided into two branches; namely household size. 4 percent (N=36) of the employee women live in the households with four or less members and 67 percent (N=24) of them indicate that having a first child is not among their objectives. Seemingly, the Bulgarians have different priorities and the majority live in the cities. On the other hand, even if the numbers are too small; 3 percent (N=27) of the employee women live in the households with four or more and approximately 93 percent (N=25) have not the desire to have a third child.

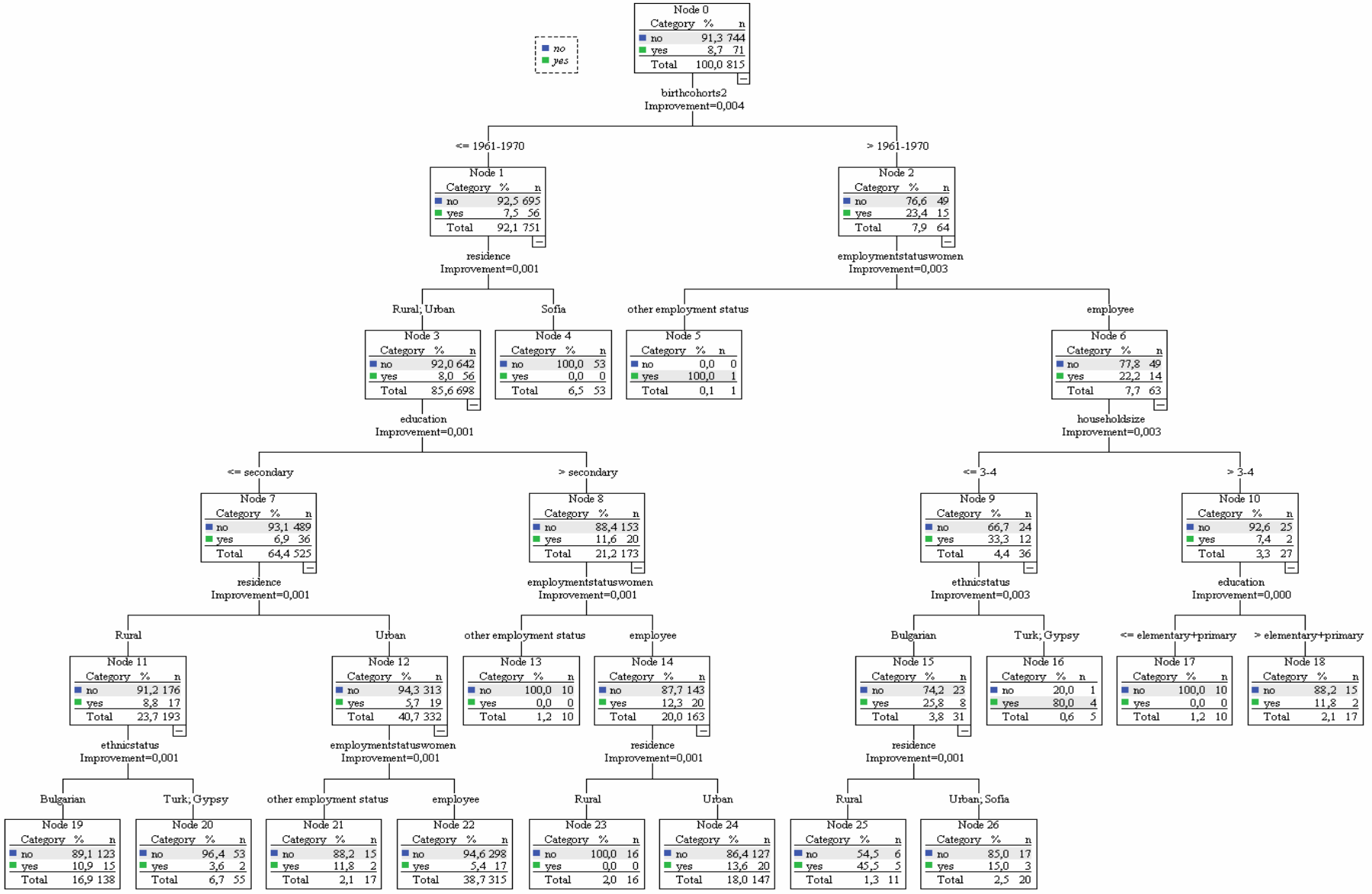
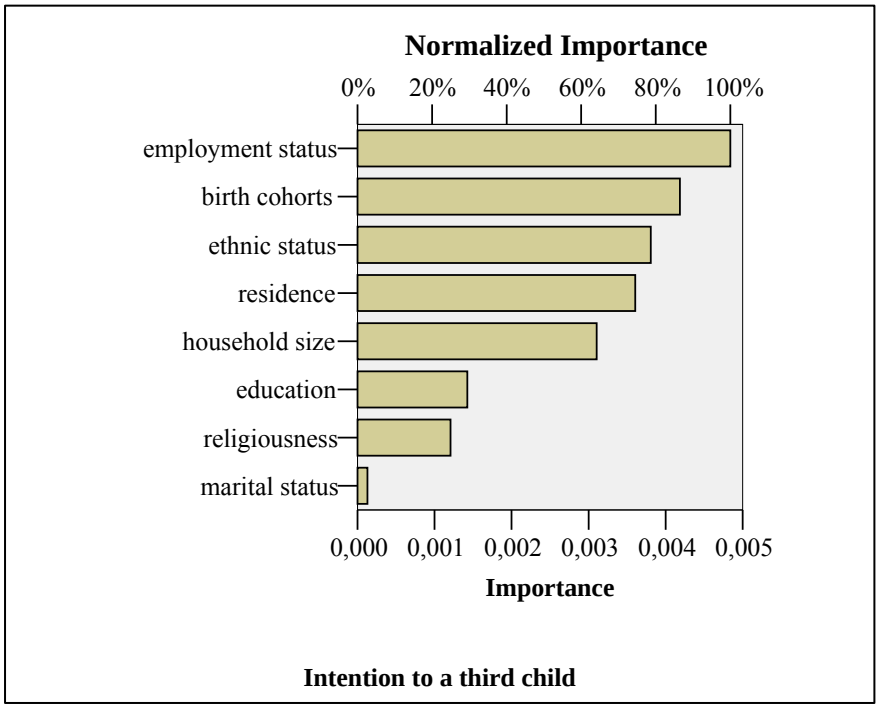


Figure XII. 3. 1. 1. Results of decision tree analysis for the determinants of the intention to have a third child, FFS-Bulgaria, 1997

Figure XII.3.1.1. Importance of the variables affecting the model on the intention to have a third child, FFS-Bulgaria, 1997



The desire to have a third child is generally low. The highest importance level is attributed to the variable of the "employment status" by the model (Figure XII.3.1.1). That is to say, intention to have a third child is most probably related with the welfare level of the parents. The "birth cohorts" is the second variable which has a strong contribution to the model. The "ethnic status" is also determining factor of the intention to have a third child. Especially having a third child is mostly peculiar to the Gypsy families and then Turkish families in the country. However, even if the given numbers regarding such a desire are very small for the Bulgarians born after 1970, the women who live in the households with three or less members and who are not Bulgarian are more likely to have a third child. On the other hand, most of them live in the rural areas. The variable which has the lowest contribution to the model is the marital status. By and large, to be in a marital union is not a requirement for the intention to have a third child.

XII. 4. THE GENERAL DECISIONS AND INTERPRETATIONS

1) The intention to have first child is generally not limited by the social and demographic characteristics of the women and frequently is not affected by the environmental conditions. The first child is always preferable for many women. However, especially for the younger cohorts, the marital status is a determining factor to the intention to have first child. Particularly, single and married women are more likely to have first child than the previously married women.

2) The tendency to have a second and a third child is usually low.

3) Birth cohorts of the women are the most effective factors on the intentions to have a(nother) child. With regard to the intention to have first child, the higher educational level positively affects the intentions of the older cohorts. The women born in 1970 or before and having higher education are more likely to have a(nother) child than the women born after 1970s and having higher education.

4) The employment status of the women is one of the determining factors of the intention to have a(nother) child particularly for the younger cohorts. The employment status seems discouraging the educational level for these cohorts, while for the older cohorts, becoming more educated is more important in order to have a(nother) child.

5) The ethnic status probably a strong determining factor. However, the case numbers into the data do not provide the true tendencies. The groups (nodes) including the “Bulgarian-Gypsy women” or the “Bulgarian-Turkish women” most probably do not give the true tendencies; however, the groups including the “Turkish and Gypsy women” probably give more reliable results. Because even if the Bulgarian women seem desirous of having a(nother) child, in reality, particularly in terms of having a second and a third child, the Turkish and Gypsy women are more desirous and well-prepared according to the Bulgarian women. Especially, in the last decade, the reproductive activities of the Gypsy women have been evaluated a social problem in the country.

6) The employment figures were reflecting a current socio-economic dilemma in the country at the time of the survey (during this study, the situation is not very different) and the poor employment conditions for the women living in post transition Bulgaria forced them to think twice in order to have a(nother) child. So, in the country, because of this "self-possessed" approach, numbers of the women who are childless or have the single-child have gradually increased since 1990.

7) The rapid urbanization started after 1960s. Even though there were governmental restrictions, majority of the rural people continued to rushing towards the cities and settled down for a long term. During the survey, 71 percent of the respondent lived in urban (including Sofia). The effects of the residential differences on the intentions to a(nother) child seem powerful for the older cohorts, particularly for the women born before 1960s. However, the younger cohorts seem that they are not concerned about the residential conditions, because majority live in the urban or in the capital city in so much as that, the proportions of the young and single women who have the desire to have a child are sometimes equal and sometimes higher (current for the intention to have first child) than the proportion of the married and previously married women who have the desire to have a(nother) child. Surely, that is also effect of that the marriage ceremony is not a necessity for having a child and that it is a social fact which is socially accepted.

8) Religiousness is not a powerful determinant of having a(nother) child for the majority of the society. Even the pronatal population policy of the government before the transition is not effected by the religious aspects of the society because of the anti-religion approach of the governmental system. The church was open and in the worship in the holly places became free. During the survey, proportion of the women indicating that they are religious is 68 percent and majority attends to visit holly places to worship. However, the religiousness, seemingly, can only affect the intention to have first child of particularly the older cohorts.

CHAPTER XIII. CONCLUSION

The 1985 census recorded Bulgaria's population at 8.9 billion. There was an increase of around 221 per thousand over the 1975 census figure. Bulgaria's 1989 population density figure of 81 people per square kilometer made it one of the least densely populated countries in Europe. The population has kept this position in the early 2000s: At the 2001 census the Bulgaria's population was 7.9 billion and population density was recorded as 71 people per squire kilometer.

Bulgaria's rate of population growth began a stable decrease in the mid-1920s, and the trend accelerated thereafter. Before World War II, the women who did not marry, or who married but had no children, were accepted as "defectives". Due to the rapid urbanization and modernization, such very traditional views speedily disappeared. The large families were no longer the economic necessity they had been in agricultural society, and extra children became a trouble because of the new living standards. Since the Bulgarian women became more educated and since they less accepted the traditional-patriarchal family norms, their attitude toward marriage and childbearing changed.

By 1980s, changes in the attitude to marriage had begun to prevail even in villages and with less-educated women. In mid-1980s, the national reports of almost all the national researches discussed the decisions and tendencies of the Bulgarian women: Majority of the Bulgarian women points out that they would not like to have any more children. According to the FFS-Bulgaria results, around 80 percent of the Bulgarian women believed two children to be ideal for both a family and the country, but because of economic and social conditions, their personal preference is to raise only one.

Number of the families with three or more children remarkably decreased, and women who had more than two children had a poorer standard of living and were generally less appreciated in society.

Although there are some expectations among people, which are based on the opinion that the large families of the past would come back in the near future, Bulgarian policy makers desperately explained that the population did not increase. During the communist period, the government authorities express that families were unwilling to have two children instead of one. By 1985, Bulgarian demographers invited about 40 percent of the Bulgarian families to have three children to make up for those which had none or only one. In the 1970s and 1980s contraceptives were not available in sufficient quantity for family planning. The strict restrictions on abortions established by the communist rule were abolished in 1990. However, contraceptive methods were in short supply and abortions had exceeded births by mid-1980s. In a more positive step, laws provided family allowances for children under sixteen. The age limit for the family allowance was raised to eighteen in 1990 for children still in school (UNDP, 2000b, 2003a, 2004). But, it was understood that even these allowances would not be enough for producing larger families.

In 1990, a negative growth rate (negative 35 births per 1,000 populations) was recorded. Number of live births per woman was 1.8. The demographers warmed that this figure had to reach to 2.1 to maintain the country's natural rate of population replacement. Mortality figures in Bulgaria were also much higher than those of the other European countries. Bulgaria can be announced as the only country which lives the most traumatic shocks (social, cultural, economic and demographic corruptions) among the other transition countries.

The main question of this dissertation is that “what are the social and demographic determinants of family formation in Bulgaria?” Surely so far consequences account for the answer of this question. Fertility trends report that if the authorities do not develop new formula, Bulgaria whose population has been steadily declining and aging will be sentenced to a demographic disappearance. Death rates were quite high at the beginning of transition and seriously accompanied to the general demographic situation. However, towards the end of 1990s, death rates began to decrease due to the capitalized health policies. Despite the restrictions in the past, abortion was popular among the women who were unintentionally pregnant. It

is still maintain its popularity today but this time despite the availability of modern contraceptive methods in the country.

In the literature, 1997 is described as the most crucial year of the country because right after this year, the struggle of the country with the undefined economy, poverty and social breakdown gains a new dimension. Everything starts to change with the arrival of stabilization and a change in the strategy and mentality bring about the acceptation that Bulgaria will survive. However, there are many "unwelcome innovation" in the society of Bulgaria. First of all, the women are the imperative part of the neo-liberal individualism replacing with the Bulgarian collectivist culture. They have more different contribution the labor market from the men and they have adapted to new living arrangements in the society, moreover, even their decisions on living with a man and having a(nother) child are more different than before.

It is a satisfactory result that marriage is still a bridge on the way of family formation in post-transition Bulgaria. Becoming the "two-child family" has been generally accepted as the ideal family type. However, due to the bad straits, changing state of employment and responsibilities of the woman, the general behavior has been realized in favor of the "one-child family". Additionally, number of the childless women has gradually increased. The descriptive studies of this dissertation point out the increasing proportion of the non-marital cohabitations. They are widespread among the younger women and among the women who have low education. On the other hand, there are many women who have higher education and divorced or separated. As regards the non-marital unions, the older cohorts are more conservative than the younger cohorts. Interestingly, the young women born after 1970s have intention to have a(nother) child in the opposite of the older women. However, either they have not a child yet or they have one child. Mean age at first marriage was 21,4 but it rose to 23,5 in 1999. According to the results, fertility intentions regarding "childlessness" and/or "fewer children" will not show meaningful change in the near future. The factors affective in the desire for the first child are generally the birth cohorts, employment status, educational level and

religiousness of the women. However, small numbers of the women have the intention to have a second child and/or a third child, and their intentions are mostly determined on the birth cohorts, ethnic status and employment status.

The tendencies in development of childbearing and matrimony account for the special interest of this dissertation. The new forms of family emerging after the transition such as single-motherhood/parenthood, non-marital cohabitation, expanded families are mentioned at the every opportunity. Of course their affects on the intention to have a(nother) child are interrogated also by statistical approaches in addition to the social and demographic points of view.

The "two-child model" which refers to the desired family form in the country is still dominant in the attitudes of the women in their reproductive ages but the share of single-child families steadily increases. The proportion of the children born out of wedlock raised by single mothers has also increased after 1990. However, that kind of information is only one of the background characteristics of the issue; this study does not include enough information about this problem because of lack of data.

It should be remembered that the overall crisis in modern family is a worldwide process and current for the other transition countries. The tendencies in reproductive attitudes and the development of childbearing in Bulgaria, and the influence of non-traditional family forms present a dramatically changed demographic structure.

Both the descriptive analysis and the multivariate analysis conclude that there is a direct relationship between the birth cohorts and women's attitudes to marriage, which is encouraged by the first assumption of this study. The oldest cohort referring to the women born in 1960 and before seems more conservative regarding the issues of family formation and childbearing. Customarily they are in favor of the nuclear family form including a mutual life and the child(ren) grown up in such a family life. The women born in 1961-1970 can be seen more moderate about the latest forms of the relationships. Their common approaches to marriage is also in support of the two-parent family, however, they have not negative response to the development of

non-marital cohabitation in the society and “broodies” who would like to have the child(ren) in that kind of relationship. The youngest cohort’s members, while their educational attainments are also bethought, mostly do not consider traditional family forms important. In theory, most of them are single but their intentions to have the child(ren) are as powerful as the intentions of married women, but in practice, the tendency toward non-marital cohabitation seems more possible in the future. The penultimate cohort (1961-1970), as a group who has the most moderate approaches to the non-marital cohabitations and also single-parenting, can be seen as the less conservative cohort than the previous one. Consequently, the family formation process in post-transition Bulgaria differentiates in relation to the birth cohorts of the women. Even though the social tolerance to the non-marital cohabitations, single-parenting, out-of-wedlock childbearing have gradually increased, in particular with the supports of the last two cohorts (1960s and 1970s), marriage is still not an outdated institution in the country.

Descriptive analysis and interpretations also give an idea about marital family is still dominant family form in the post-socialist community of Bulgaria, that is to say, it continues to be the most preferred form of mutual life and raising children. In general, the previously married (widowed, divorced, separated) women have more than one non-marital relationship while 93 percent of the married women and about 86 percent of the single women have never been in a non-marital cohabitation. On the other hand, the tendency to increase in the incomplete family forms should not be ignored, because, number of one-parented families, usually that is the mother, has gradually increased and involved the risk of superseding the marital family in the future. These interpretations also give confidence to the assumption 2 regarding the dominant profile of the marital family unions in the country.

The data do not provide any satisfactory information on the attitudes to marriage and fertility intentions of women coming from the different ethnic groups and in that case, the assumptions 3 and 5 can not be verified by the data analysis. The Bulgarian women account for exactly 87,5 percent of the sample and such a proportional distribution can not sufficiently reflect the characteristics of the other

ethnic groups in the country. With respect to the marriage, the Turkish women seem closer to the opinion of building a family than their Bulgarian and Gypsy counterparts. The Bulgarian women, especially young women, are less likely to marry at the early ages unless the some forced elements are discussed such as first pregnancy, traditionalism and/or religiousness and the like. The tendency to divorce among the Bulgarian women is also more than their Turkish and Gypsy counterparts. Around 8 percent of the respondents are Turks and, with regard to the intentions to have a(nother) child, the likelihood of having a second child for the Turkish women decreases 4 times as that of the Bulgarian women. If the general living standards of the Gypsy women are taking into consideration, an increase in number of the families with at least two children can be foreseen. However, according to the results of the analysis, for the Gypsy women, the likelihood of having a second child is not significant. As for the likelihood of having a third child for the Bulgarian women, it is 3 times more than the Gypsy women. Because of this reason, it can be said that the second hypothesis of the study does not completely encouraged by the results.

The assumption 4 assumes that women's attitudes to motherhood are determined according to their working status. Although the data do not provide comprehensive information about the respondent's welfare status, by looking at their employment status, it is possible to have an idea about their fertility intentions. The proportion of the previously married women who are currently working is about 11 percent more than the married women who are currently working. About 95 percent of the single women and about 91 percent of the married women are employee. Employment status of the women affects the intention to have first and a second child. The employee women are about 5 times less likely to have first child than their counterparts who have different jobs. However, they are 2 times more likely to have a second child than the women working in the other employment areas.

The educational level inversely related with the non-marital cohabitation. The women who have low education generally seem the supportive of living in the non-marital cohabitations as indicated also in the assumption 6. On the other hand, educational level of the women determines their marital status, too. Most of the

previously married women have higher education. The proportion of the graduates of secondary school who consider that marriage is not an outdated institution is fewer than ones graduated from the primary school (about 74 percent) As for the women who have higher education, they generally consider the marriage important, but the tendency of seeing it as just a traditional institution seems stronger in the future. With regard to the intention to have a(nother) child, educational level is a determining factor of the intention to have a third child. The likelihood of having a third child for the women who have secondary education is 3 times more than the women having higher education. In addition, the women who are the members of older cohorts and have higher education are more likely to have a(nother) child than their young counterparts having higher education.

Even if marriage is not a necessity for having the child(ren), the analysis confirm that, in most cases, all women having their first pregnancy would like to be married when they deliver the child. Hence, assumption 7 related with the expected relation between the first pregnancy and transition to first marriage is also supported.

With respect to the household size, it should be mentioned that the women in their reproductive ages mostly prefer to live in the extended households. The proportion of the married women living with children increases across age while the proportion of married women not living with children decreases very slowly across age; particularly after the age of 40, because the children have grown and left home, the change is in inverse direction. The women aged 18-19 still live with their parents (74 percent), but when the age reaches by 20, more than 20 percent of the young women leave home. While 24 percent of the women still live with their parents and 31 percent live with the other relatives. For the Bulgarian households with three or four members, the mean number of live births rises to 1,6. In other words, when the household size expands, the mean number of live births increases.

Because of the rapid urbanization coming across the 1960s, it is really difficult to make a distinction among urban and rural women. At the time of the survey, the proportional difference between the urban and rural areas is quite small. The “types

of place of residence" is used in three categories: Urban, rural, Sofia (the only city whose population is more than 1.000.000). 32 percent of the married women live in Sofia. Around 62 percent of both married women and previously married women live in urban. It should be said that generally most of the women in their reproductive ages live in urban areas. In the rural areas the proportion of the previously women is 6 percent; it is quite less than the proportion of the married and single women living the rural areas. According to the results the intention to have first child can be determined by the type of place of residence. The likelihood of having first child is almost 2 times fewer among the women living in the urban areas than the rural women. Similarly, it is about 9 times fewer among the women living in Sofia than their counterparts living in the rural areas. The likelihood of having a third child is about 6 times fewer among the rural women, and about 4 times fewer among the urban women than the women living in Sofia.

Two questions on the religiousness of the women were asked during the survey. However, in Bulgaria affiliation to Orthodox (some 90 percent) is one of the substantial parts of the cultural identity. Even non-religious persons can feel themselves as the member of Bulgarian Orthodox. The frequency of attendance to the religious ceremonies seems very rare. In reality, religiousness is not considered as a social factor affecting the reproductive behaviors of the women. At that point it should be considered that such an effective status gains the religiousness a different status from its widespread description.

The well-known study of Grace Davie, "Believing without belonging" [36] talks about the religiosity which goes beyond the religious affiliation. In Bulgaria even if the religiosity seems like socially ineffective, the "spiritual worlds" of the people sometimes can affect their decisions regarding their lives. During this study "religiousness of the respondent" appears as one of the determining factors of the

[36] One of the most known studies of Grace Davie. *'Believing without belonging' has become the catchphrase of much European work on religion in the past decade. The thesis that religious belief is fairly robust even if churchgoing is declining is examined using data from the British Household Panel Survey and the British Social Attitudes surveys.* (Voas and Crocket: 2005.) http://soc.sagepub.com/cgi/content/refs/39/1/11 This Grace Davie's approach is used also in the study rested on Social Capital Survey Data conducted by 2005.

woman's desire to have first child. The women who are not religious are about 3 times less likely to have first child.

Consequently, in the light of all the explanations, the hypotheses of the study are supported by the multivariate analyses as well as the descriptive approaches. With regard to H1, the intentions to have first, a second and a third child are separately characterized by the seven basic characteristics of the women: Birth cohorts, current marital status, types of place of residence, employment status, religiousness, household size, and level of education. Although the ethnic status is many times mentioned as an important factor that effect the fertility intentions, the data has not enough case number representing true proportional division of the ethnic groups in the country so, in this study, especially in relation to the multivariate analyses, it is not proper to discuss on any consequence about the ethnic determinations. As for H2, it seems that the partner's characteristics; level of education, partner's children wish, employment status and religiousness of the partner effect fertility intentions of the women in certain proportions. The H3 reflects the relationship between fertility intentions and the given statements based on the general and recent approaches to the parental responsibilities and partnership. The results also encourage the consequence that the recent approaches to marriage determines the desire for a(nother) child.

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APPENDIX 1. "FERTILITY AND FAMILY SURVEY-BULGARIA" QUESTIONNAIRE

APPENDIX 2. FREQUENCY TABLES

Frequency Tables

birthcohorts

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	78-79	106	4,5	4,6	4,6
	73-77	365	15,4	16,0	20,6
	68-72	460	19,4	20,1	40,8
	63-67	440	18,6	19,3	60,0
	58-62	460	19,4	20,1	80,2
	53-57	369	15,6	16,2	96,3
	52	84	3,5	3,7	100,0
	Total	2284	96,5	100,0	
Missing	System	83	3,5		
Total		2367	100,0		

any live births?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1799	76,0	76,0	76,0
	no	568	24,0	24,0	100,0
	Total	2367	100,0	100,0	

number of live births

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	712	30,1	39,6	39,6
	2	960	40,6	53,4	92,9
	3	101	4,3	5,6	98,6
	4	23	1,0	1,3	99,8
	5	3	,1	,2	100,0
	Total	1799	76,0	100,0	
Missing	System	568	24,0		
Total		2367	100,0		

ideal number of children for this country

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	2	,1	,1	,1
	1	248	10,5	10,7	10,8
	2	601	25,4	25,9	36,7
	3	108	4,6	4,7	41,3
	4	4	,2	,2	41,5
	7	1	,0	,0	41,6
	8	1	,0	,0	41,6
	12	250	10,6	10,8	52,4
	13	2	,1	,1	52,5
	21	2	,1	,1	52,5
	22	2	,1	,1	52,6
	23	789	33,3	34,0	86,6
	27	1	,0	,0	86,7
	32	1	,0	,0	86,7
	34	14	,6	,6	87,3
	43	38	1,6	1,6	89,0
	45	1	,0	,0	89,0
	56	2	,1	,1	89,1
	don t know	253	10,7	10,9	100,0
	Total	2320	98,0	100,0	
Missing	System	47	2,0		
Total		2367	100,0		

idealchi (recoded)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not necessary	2	,1	,1	,1
	one	248	10,5	12,3	12,4
	one or two	250	10,6	12,4	24,8
	two	601	25,4	29,8	54,6
	two or three	789	33,3	39,1	93,7
	three	108	4,6	5,4	99,1
	three or four	14	,6	,7	99,8
	four	4	,2	,2	100,0
	four or five	1	,0	,0	100,0
	Total	2017	85,2	100,0	
Missing	System	350	14,8		
Total		2367	100,0		

current marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	single	462	19,5	19,6	19,6
	married	1721	72,7	73,0	92,6
	widowed	39	1,6	1,7	94,2
	divorced	117	4,9	5,0	99,2
	legally separated	19	,8	,8	100,0
	Total	2358	99,6	100,0	
Missing	System	9	,4		
Total		2367	100,0		

migrant status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	bulgarian	2071	87,5	88,5	88,5
	turc	189	8,0	8,1	96,6
	gipsy	77	3,3	3,3	99,9
	other	3	,1	,1	100,0
	Total	2340	98,9	100,0	
Missing	System	27	1,1		
Total		2367	100,0		

household size

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	55	2,3	2,3	2,3
	2	227	9,6	9,6	11,9
	3	604	25,5	25,5	37,4
	4	874	36,9	36,9	74,4
	5	367	15,5	15,5	89,9
	6	183	7,7	7,7	97,6
	7	41	1,7	1,7	99,3
	8	16	,7	,7	100,0
	Total	2367	100,0	100,0	

number of children by mother

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	363	15,3	15,5	15,5
	2	1446	61,1	61,8	77,3
	3	361	15,3	15,4	92,8
	4	109	4,6	4,7	97,4
	5	33	1,4	1,4	98,8
	6	10	,4	,4	99,3
	7	3	,1	,1	99,4
	8	6	,3	,3	99,7
	9	7	,3	,3	100,0
	97	1	,0	,0	100,0
	Total	2339	98,8	100,0	
Missing	System	28	1,2		
Total		2367	100,0		

maritalstatus

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	single	462	19,5	19,6	19,6
	married	1721	72,7	73,0	92,6
	previously married	175	7,4	7,4	100,0
	Total	2358	99,6	100,0	
Missing	System	9	,4		
Total		2367	100,0		

locality of current residence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	*r1 = till 2,000 inhabit.	378	16,0	16,3	16,3
	*r2 = above 2,000 inhabit.	285	12,0	12,3	28,6
	u2 = 2,000-9,999	225	9,5	9,7	38,2
	u3 = 10,000-99,999	695	29,4	29,9	68,2
	u4 = 100,000+	490	20,7	21,1	89,3
	u5 = 1,000,000+	249	10,5	10,7	100,0
	Total	2322	98,1	100,0	
Missing	System	45	1,9		
Total		2367	100,0		

* Wrong classification is corrected by Dimiter Philipov in person and reformulated as "Rural (Village)= (r_1+r_2)".

children wish partner

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	same	1173	49,6	77,9	77,9
	more	89	3,8	5,9	83,8
	fewer	23	1,0	1,5	85,3
	4**	218	9,2	14,5	99,8
	don t know	3	,1	,2	100,0
	Total	1506	63,6	100,0	
Missing	System	861	36,4		
Total		2367	100,0		

** "4" and "don't know" were evaluated as a category and are not included in the analyses.

religiousness respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	573	24,2	24,7	24,7
	somewhat	1008	42,6	43,5	68,2
	no	738	31,2	31,8	100,0
	Total	2319	98,0	100,0	
Missing	System	48	2,0		
Total		2367	100,0		

religiousness partner

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	166	7,0	10,7	10,7
	somewhat	466	19,7	30,1	40,9
	no	856	36,2	55,3	96,2
	4	59	2,5	3,8	100,0
	Total	1547	65,4	100,0	
Missing	System	820	34,6		
Total		2367	100,0		

employment status partner

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	employer	78	3,3	6,3	6,3
	own-account worker	91	3,8	7,4	13,7
	employee	1001	42,3	80,9	94,5
	unpaid family worker	2	,1	,2	94,7
	cooperative s member	39	1,6	3,2	97,8
	other (including 4)	27	1,1	2,2	100,0
	Total	1238	52,3	100,0	
Missing	System	1129	47,7		
Total		2367	100,0		

ever had a job of 3+ months?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1347	56,9	59,9	59,9
	no	900	38,0	40,1	100,0
	Total	2247	94,9	100,0	
Missing	System	120	5,1		
Total		2367	100,0		

first method ever used

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	st. self	5	,2	,4	,4
	pill	220	9,3	17,3	17,7
	intra-uterine device	89	3,8	7,0	24,7
	injections	3	,1	,2	25,0
	diaphragm, foam, etc	9	,4	,7	25,7
	condom	386	16,3	30,4	56,1
	periodic abstinence	93	3,9	7,3	63,4
	withdrawal	436	18,4	34,4	97,8
	any other method(s)	24	1,0	1,9	99,7
	99	4	,2	,3	100,0
	Total	1269	53,6	100,0	
Missing	System	1098	46,4		
Total		2367	100,0		

current method

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	st. self	5	,2	,6	,6
	st. current partner	2	,1	,2	,8
	st. ex-partner	2	,1	,2	1,0
	pill	139	5,9	16,0	17,0
	intra-uterine device	136	5,7	15,6	32,6
	diaphragm, foam, etc	16	,7	1,8	34,4
	condom	260	11,0	29,9	64,3
	periodic abstinence	45	1,9	5,2	69,5
	withdrawal	260	11,0	29,9	99,3
	any other method(s)	6	,3	,7	100,0
	Total	871	36,8	100,0	
Missing	System	1496	63,2		
Total		2367	100,0		

ever non-marital cohabitation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	229	9,7	10,2	10,2
	no	2021	85,4	89,8	100,0
	Total	2250	95,1	100,0	
Missing	System	117	4,9		
Total		2367	100,0		

current non-marital cohabitation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	30	1,3	21,7	21,7
	no	108	4,6	78,3	100,0
	Total	138	5,8	100,0	
Missing	System	2229	94,2		
Total		2367	100,0		

separation/divorce parents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	145	6,1	6,4	6,4
	no	2111	89,2	92,9	99,3
	don t know	17	,7	,7	100,0
	Total	2273	96,0	100,0	
Missing	System	94	4,0		
Total		2367	100,0		

composition hhold of origin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	with both parents	2189	92,5	92,8	92,8
	with father only	25	1,1	1,1	93,8
	with mother only	115	4,9	4,9	98,7
	with neither parent	31	1,3	1,3	100,0
	Total	2360	99,7	100,0	
Missing	System	7	,3		
Total		2367	100,0		