

FERTILITY AND NUPTIALITY CHANGES IN CENTRAL AND EASTERN EUROPE: 1982 - 1993

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Introduction

The governments in central and eastern Europe have undergone unprecedented changes during 1989-1991. The transformation was of a scale rarely seen in the twentieth century, a period of major political upheavals not only in Europe but also on other continents. Within a few years, in the majority of these countries, one-party regimes have been replaced by multi-party democracies. In a number of countries the

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change of government was preceded by a period of political turbulence. In some, the political instability prior to the fall of the old regimes was compressed into a few weeks, in others days. For most part the rise of parliamentary democracy took place peacefully; only in a few instances did the forces of change clashed violently with those seeking to preserve the status quo.¹

The changes of government were by far the most significant aspect of the political shifts at the turn of the 1980s. Another aspect, also of great importance, was the dissolution of the federal, multi-ethnic states - Czechoslovakia, the Soviet Union and Yugoslavia. The result has been the creation of 22 new states, which increased the number of central and east European countries to 27. Some of the new states are highly ethnically homogenous, such as the Czech Republic and Slovenia. Many others, for example Estonia, Slovakia and Ukraine have large ethnic minorities. A few of them, the prime example being Bosnia and Herzegovina are a tangle of ethnic and/or religious groups. The collapse of these federal states dwarfed the birth of new nations that followed the First World War, the most important redrawing of the political map of Europe of this century prior to the early 1990s. It also resulted in the independence of numerous nations, some of whom had sought sovereignty for decades, while at the same time creating a plethora of fresh ethnic problems.

One other significant aspect of the political transformation was the revival and, in a number of instances, upsurge of reawakened nationalism, with its many ramifications. It was nationalism, in a number of old as well as new states, that pitted one ethnic group or state against the other. On many occasions this led to ethnic tensions, violations of minority rights, civil wars and inter-state conflicts. The brutality of some of the conflicts, where civilians were caught in the cross-fire has not been seen in many parts of the world, certainly not in Europe, since the Second World War. The violent conflicts, some of which have continued

¹ This introduction seeks to provide a backdrop on political and economic changes in the transition countries for the subsequent analysis of fertility and nuptiality trends. It is not intended to be an authoritative condensed piece on those changes, since such a piece could only be written by a political scientist/economist thoroughly familiar with this part of Europe. In order to keep the introduction relatively brief, the discussion of social issues is downplayed.

into 1995, have been confined to parts of former Yugoslavia and the former Soviet Union; their effects have, however, often spilled over the borders, into neighboring countries, adding to their political and/or economic difficulties.

A major reason for the collapse of the communist regimes was their failure to reform their economies by liberating them from the controls of central planning. Therefore, it was natural that the post-communist governments in many countries undertook the conversion from centrally planned into market economies, a truly unprecedented task. The effort to accomplish this transition gave this group of countries their generic name - "countries in transition" or "countries with economies in transition", a euphemism for the new central and east European democracies undergoing a painful economic restructuring. The price of the restructuring has been a decline in output, employment and real incomes, associated in many countries with a rise in unemployment and inflation; these two phenomena were typically unknown in former centrally planned economies. In a number of countries these developments have caused widespread poverty and the break-up of the comprehensive, equitable and relatively generous safety net developed by the former regimes. Only recently, in a handful of countries a reversal of the trends in output and real incomes have been observed.

The 27 countries in transition are often perceived as a group whose members share many common traits. They are, however, a rather heterogeneous collection of states, a more diverse one than their predecessors; some are undergoing a less traumatic transition than others. Firstly, there are countries which have switched from a one-party political system to a stable parliamentary democracy in a quick and orderly way, while in a number of others this transition was slower and turbulent. In some countries it is hard to tell whether democratic institutions are taking root. Secondly, only the newly independent countries - the large majority of the countries in transition - have experienced the breakdown of the ancestral states. The majority of people in several of these countries have welcomed the change, those in some others have resented it and it is possible that many people, at least, in some new states remained indifferent. Thirdly, several countries, which however form a minority of the transition countries, have experienced civil or inter-state wars on their territories, ranging from those that have

left a few scars, to conflicts that have been extremely devastating. Last, but not the least, the economic, social and psychological costs of the transition to a market economy have varied greatly across these countries. For example, at one end of the spectrum, a few central European countries, after a few years of economic decline, have seen their economies growing again since 1993 or later. The least successful countries have not arrested their economic decline in 1995 and are unlikely to see a turnaround in the next one to two years.

The depth and breadth of the transformation, the number of countries undergoing it, the short time span within which it is compressed, and the multitude of people affected by the change all suggest that this is a development without precedent. It is, therefore, not surprising that this transformation has profoundly affected, in many different ways, the lives and behaviour of the hundreds of millions of people. Reliable research findings along with anecdotal evidence, direct as well as indirect, on many aspects the changes to peoples' lives in this part of Europe are now being accumulated at a relative quick pace. A number of institutions and individuals are adding new knowledge about these countries, however, the knowledge remains patchy and, at times, unreliable. This applies to many areas of learning including population studies. It is only in 1994-1995 that findings shedding light on radically changed demographic behaviour in some of these countries began to emerge (Eberstadt, 1994). It appears that, at least, a few years will elapse before the demographers studying these countries will be able to draw a relatively comprehensive picture of the population trends in the first half of the 1990s emanating from the modified demographic behaviour, which is, at present, grossly incomplete.

This paper seeks to contribute to this picture by documenting changes over time in fertility and first marriage in more than half of the transition countries, which appear to have been associated with the political and economic transformation.² The analysis focuses on the time patterns in

² Fifteen countries in transition, which will be presently listed, are included in this analysis; along with the eastern part of Germany, the former German Democratic Republic (GDR), which will be referred to as East Germany and, for simplicity of exposition, counted among the transition countries. The 12 remaining transition countries are not included as requisite data from those countries were not available to the author at the time of writing. In view of the lack of information, the results presented here are, for the time being, provisional. More complete results will be presented in an expanded

the levels and timing of overall fertility and first marriage among women during 1982-1993. It does not seek to explain how the various aspects of the transformation might have influenced those patterns; this would require a separate analysis. Having included in the analysis several years prior to the onset of the transformation, we seek to answer the following questions: What were the nature, timing and magnitude of the changes in overall fertility and first marriage, which are respectively measured by the period total fertility rate and the period total first marriage rate? Were the changes in first marriage accompanied by those in non-marital cohabitation? Although interesting in its own right, this question is addressed as a side issue due to data limitations, by looking at the proportions of extramarital births. And lastly, were the shifts in overall fertility and first marriage accompanied by those in their timing, as measured by the mean age of childbearing and the mean age at entry into first marriage, respectively?³ The analysis is cast within a broader European context by making comparisons between the countries with economies in transition and selected European countries with market economies, referred to as the west European countries.⁴

version of the paper, once the data are received from all, or the majority, of those transition countries which have not provided them yet but are capable of doing so. This expanded version of the paper will not, however, include countries, such as Bosnia and Herzegovina and Croatia, which due to recent or ongoing armed conflicts do not possess relatively complete and reliable relevant information for their entire territories.

³ The data used in the analysis came directly or indirectly from the national statistical offices. Wherever possible, information available from the United Nations Demographic Yearbook (United Nations, various years), the archives of the United Nations Statistical Office, and from the Council of Europe (Council of Europe, various years) were used. The rest of the data were provided by the national statistical offices on request from the Economic Commission for Europe. The information used was at rare instances incomplete or inadequate for the purpose at hand; given the preliminary nature of this analysis, the difficulties arising from this were brushed aside. The incompleteness manifests itself as breaks in the time series and/or missing data for the years, such as 1993. The only type of inadequacy known to the author arises rarely due to the fact that the estimated populations by age and sex used to calculate total fertility rates and total first marriage rates refer to dates different from the middle of the year. Requisite interpolations to obtain estimates for the middle of the year were not made yet.

⁴ Comparisons with western Europe will be made in order to indicate whether or not the trends and levels in fertility and nuptiality observed in the transition countries for the recent past are without precedent in post-Second World War Europe. The comparisons will involve trends and levels in two different parts of Europe that have experienced vastly different political, economic and social conditions, and this should be kept in mind.

In order to account for similarities or differences in their demographic trends, the transition countries can be grouped in different ways. One, possibly the simplest of them all is to split them into central and eastern European countries. The grouping that is used in this analysis is finer - it distinguishes six groups, which listed alphabetically are as follows: the Balkans, the Baltics, central Asia, central Europe, the Slavic states, and the Transcaucasian states.⁵ The composition of these groups is as follows:

- the Balkans: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Former Yugoslav Republic of Macedonia, Romania, and Yugoslavia (Serbia and Montenegro);
- the Baltics: Estonia, Latvia, and Lithuania;
- Central Asia: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan;
- Central Europe: the Czech Republic, East Germany (the former German Democratic Republic), Hungary, Poland, the Slovak Republic, and Slovenia;
- the Slavic states: Belarus, Moldova, the Russian Federation, and Ukraine; and
- the Transcaucasian states: Armenia, Azerbaijan, and Georgia.

This paper considers some or all of the countries of the following groups: the Balkans, the Baltics, central Europe, and the Slavic states. Only three countries of the first group are included - Bulgaria, Romania, and Yugoslavia. All countries in the remaining three groups are included. Central Asia is excluded as the only data available were those from

The main features of those conditions in western Europe have been relative political stability and economic prosperity, those in the transition countries political turbulence and economic decline.

⁵ Clearly, some of the names selected for the groups of countries do not do justice to the diversity or geographic location of the countries in the groups. Thus, Moldova is put in the group called "the Slavic states" although the majority of Moldovans are not Slavs. Moreover, there are many Slavic countries other than those included in this group. Kazakhstan does not consider itself to be a central Asian country, however, it was included in the group called "central Asia". The selection of the names was guided by the need to keep them relatively brief rather than by the necessity of making them very precise.

Kyrgystan. The Transcaucasian states are excluded since the information was received from only one of them (Azerbaijan) and this came at too late a stage to be analysed. To sum up, the discussion that follows refers to the 16 countries and the four groups just identified.

Overall fertility

a. Trends in total fertility rates

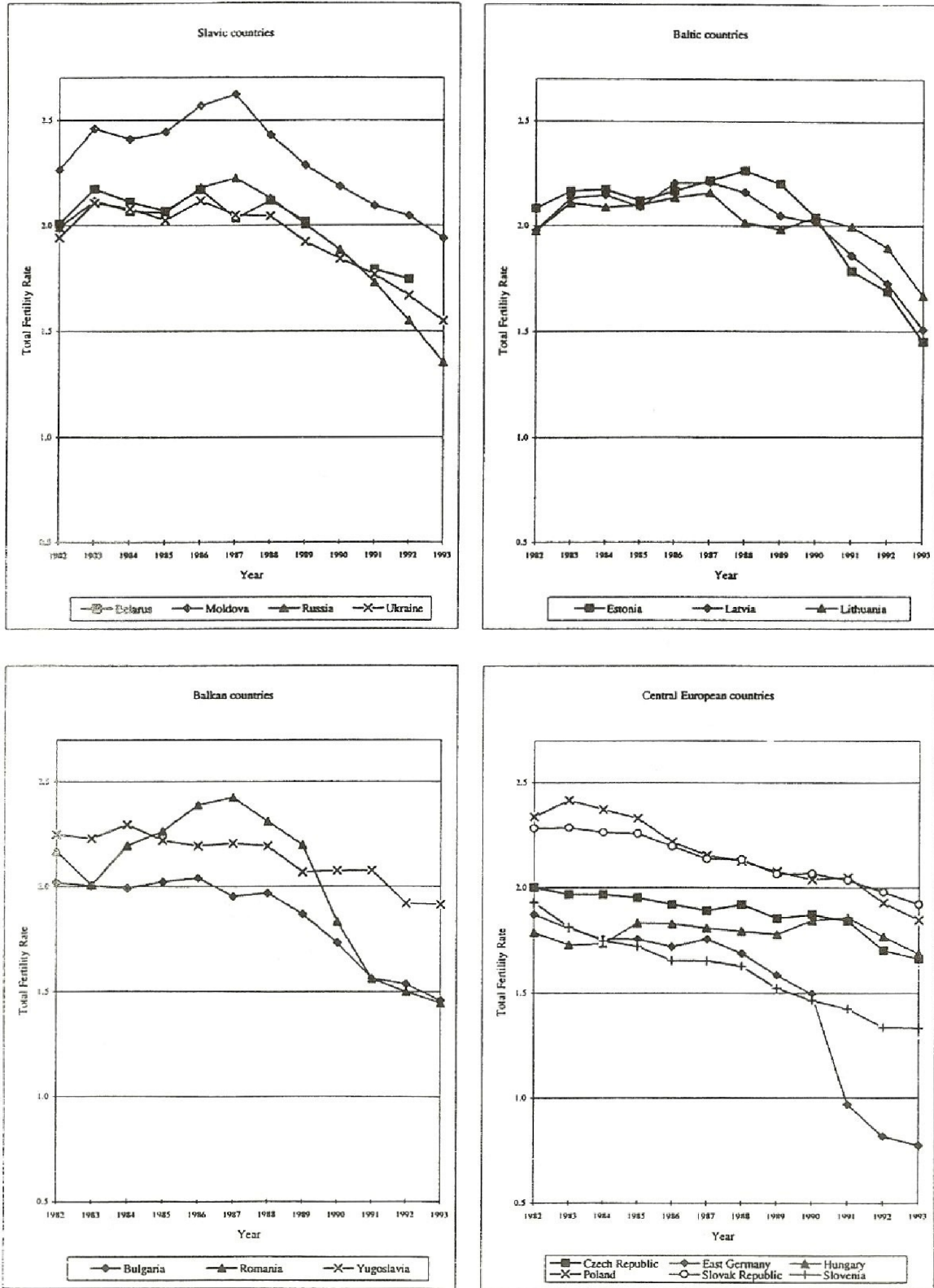
Levels in 1982 and 1993. In all transition countries under consideration, total fertility rates were higher in 1982, and sometimes considerably higher, than in 1993. The 1982 rates were relatively high by developed countries' standards of the early 1980s, with the vast majority of the transition countries, 13 in total, having total fertility rates of around two children per woman or higher. In the remaining three countries, all in central Europe - East Germany, Hungary and Slovenia - the rates were just below two children per women, but never below 1.8. The rates of these sixteen countries were all within a relatively narrow band, 1.8 - 2.3 (figure 1).

In western Europe, around that same time (1980), among 16 countries with market economies, only four countries, three of which lie in the south - Greece, Portugal, Spain and Ireland - had total fertility rates higher than two.⁶ The remaining countries had total fertility rates below this level, with the lowest rates observed in the former Federal Republic of Germany (West Germany), the Netherlands, and Switzerland, all at or below 1.6 (Council of Europe, 1994). The rates of this group fell in the range 1.5 - 3.2. This latter rate, recorded for Ireland, was a true outlier.

In 1993, the fertility levels of the transition countries analysed presented an entirely new situation, which was now on a par with that of western Europe during the past 10 to 15 years. Not a single transition country had, in this year, a total fertility rate equal to two or higher (figure 1).

⁶ Excluded from this analysis are the following small west European countries: Cyprus, Iceland, Liechtenstein, Luxembourg, Malta, and San Marino.

Figure 1. Total Fertility Rates



Seven countries, some of them with the largest populations - Bulgaria, Estonia, Latvia, Romania, Russia, Slovenia, and Ukraine - had rates around 1.5 or below. The total fertility rates of Russia and Slovenia (1.36 and 1.33, respectively), countries with vastly different populations in 1993, reached levels similar to those observed a few years ago in some west European countries which now have the lowest fertility rates. In this same year, East Germany reached an unprecedented low rate for a sizable population, 0.77. The rates for the 16 transition countries were scattered over a considerably wide range, between 0.8 and 1.9.

Among the sixteen western countries, in 1993, only one - Sweden - had a total fertility rate equal to two. Seven countries, including West Germany, had rates in 1992 or 1993 of around 1.5 or less, with the lowest rates recorded in the south - Greece (1.35), Italy (1.25) and Spain (1.24) (Council of Europe, 1994).⁷ The range was narrower than in 1980: 1.2 - 2.0. This suggests that the differences in terms of the level and the spread in overall fertility, which had existed in the early 1980s between the present-day transition countries and the west European countries by and large disappeared by 1993. Moreover, several transition countries, among them Russia and Slovenia appear to have been converging toward the fertility levels reached in Italy and Spain in the early 1990s, the lowest ever attained in a sizable national population.

Changes during 1982-1993. The data suggest two broad patterns of change in overall fertility in the transition countries under consideration during the 12-year period. The Baltic and Slavic states - all former Soviet republics, traced one pattern, while the Balkan and central European countries, another (figure 1). The shifts in the Baltic and Slavic states displayed a high degree of similarity, those in the Balkan and the central European countries a measure of diversity. Among the latter countries, some experienced changes resembling, to a certain extent, those in the Baltic and Slavic countries.

The seven countries belonging to the Baltic and the Slavic groups have all experienced fluctuations in total fertility rates from 1982 onwards, at levels of higher than two children per women. In the majority of these

⁷ The latest information on the Belgian total fertility rate provided by the Council of Europe (1994) is for 1989 and, therefore, Belgium is not among the countries considered here.

countries, all except Belarus and Ukraine, the fluctuations were along an upward trend, resulting in peaks which were reached, depending on the country, in 1986, 1987 or 1988. In Belarus and Ukraine, the fluctuations were around a horizontal trend up to 1988. In all seven countries except Lithuania the fluctuations were followed by a persistent and typically sharp decline towards 1993; the decline in Lithuania was temporarily reversed between 1989-1991. The timing and the magnitude of these rapid declines will be considered presently.

Five Balkan and central European countries - the Czech Republic, Poland, Slovakia, Slovenia, and Yugoslavia - share one common trait. They have all experienced almost uninterrupted declines throughout 1982-1993, however, at varying speeds. Some of these countries also showed clear signs of acceleration in the early 1990s. Two other countries among these nine - Bulgaria and East Germany - have also experienced uninterrupted declines, but they differ from the five just alluded to in that the acceleration of their declines occurred at earlier dates, and was much more pronounced, particularly in East Germany. One other country - Hungary - experienced falls followed by increases around an approximately horizontal trend, the fluctuations which turned in the early 1990s into what might become a longer decline than the previous ones. The remaining country - Romania - is a clear outlier of these two groups. Details aside, it followed the pattern observed among the seven former Soviet republics, but a much more pronounced one.

The timing and magnitude of the recent declines. The rapid fertility declines together with less striking falls which occurred towards 1993 invite questions regarding the timing of the onset of these declines as well their magnitude. Establishing the year after which the decline began in any given country and, in some instances, assessing the magnitude of the decline are not problem-free tasks. The difficulties involved can be illustrated using, as an example, the change in total fertility rate in Moldova. In particular, in this instance, the question is: should one select 1987, the year when the rate peaked, as the date after which the decline began or, alternatively, should one accept the rate for 1988 as an outcome of the fluctuations observed from 1982 onwards, and choose 1988 as the year after which the decline set in? Another illustration is provided by the trend in total fertility rate in East Germany, where the

question is whether one should take 1987 or 1990 as the year after which the rapid decline began?

In this analysis, this dilemma was resolved by making the assumption that in the countries that experienced fertility fluctuations the levels which total fertility rate attained one or two years after the peak had been reached, such as that for Moldova attained in 1988, were part of the fluctuations rather than the beginning of the decline that followed. The assumption made for the countries where more or less steady declines suddenly accelerated, such as that observed in East Germany, was that the critical phase of the decline of interest in this analysis began after the marked shift in the trend. Needless to say, these assumptions necessarily result in selecting later rather than earlier dates, as those after which the declines set in. In addition, they also, in a number of instances, lead to conservative assessments of the relative reductions in total fertility rates between the levels in the latest pre-decline years and in 1993.⁸

Using these assumptions, the results regarding the latest pre-decline year for each country were reached. Also, the results indicating the reduction in total fertility rate in each subsequent year, relative to the level for the pre-decline year selected were derived; these latter results are index numbers obtained by setting the value for the pre-decline year to 100. These results, shown in table 1, were derived for all the transition countries considered, except Slovenia. This former Yugoslav republic has experienced a steady, almost linear downward trend in total fertility rate, that for all practical purposes was unaffected by the events at the turn of the 1980s.⁹ The results can be summarized as follows.

In the countries in the Baltic and Slavic groups, the former Soviet republics, the rapid decline began in 1989 or 1990. In one exceptional case, Lithuania, it was delayed until 1992. This late onset of the decline

⁸ The monthly numbers of births were available for the transition countries considered for the time period 1982-1993, however, they were not analyzed. Their future analysis as part of a continuation of this study may shed more light on the timing of the onset of fertility declines associated with the transformation in these countries. This additional analysis may alter some of the conclusions to be presently drawn regarding the timing and the magnitude of the fertility declines.

⁹ Note a slightly steeper decline in the Slovenian total fertility rate after 1988 relative to that prior to this year. Compared to that of all other transition countries concerned, this acceleration, due to its limited degree, may be safely ignored.

was, however, preceded by a moderate drop during 1988-1989, followed by a slight recovery. If the period between conception and birth is taken into account, it becomes evident that the change in the fertility behaviour, that is the restraint from child-bearing was getting under way in these countries as early as 1988-1989 - the heyday of *perestroika*, well before the formal dissolution of the Soviet Union on 31 December 1991.

In the three Balkan countries the fertility declines commenced at different dates between 1989 and 1992, while the declines in the central European countries all began in 1992, except that in East Germany, which started a year earlier. Bulgaria and Romania were similar to the Baltic and Slavic states, they were among the first transition countries to begin modifying their child-bearing behaviour, in 1988 and 1989, respectively. This was well before their first free elections and the change of government. Yugoslavia appears to have been as late as the central European countries, where the change in behaviour coincided with the beginning of the break-up of the country in 1991. In central Europe (except in Slovenia as alluded to above), the change in behaviour occurred in 1991, after the change of government. The exception is East Germany, where the change was triggered by the events leading to the fall of the Berlin Wall (Eberstadt, 1994).

Once the declines got under way, they proceeded without interruption throughout 1993; the lack of data for the three transition countries for this year renders this conclusion tentative. As a rule, the earlier the onset of the decline, the larger the relative size of the decline by 1993. The magnitude of the decline by 1993 relative to the pre-decline level was largest in the Baltic and the Slavic countries, ranging between close to one-fifth (Lithuania) and more than one-third (Estonia and Russia). It was equally large in Bulgaria and Romania, amounting to approximately one-fourth and one-third, respectively. In the remaining central European countries, except East Germany, the declines were all within one-tenth of the pre-decline level. In East Germany, however, the already low total fertility rate in 1990 (1.5) was cut in half within the next three years, an incredibly rapid drop.

How do these declines compare to those observed in western Europe since the middle of the 1960s, the period of rapid post-Second World

Table 1
The timing and the magnitude of the rapid fertility decline

Group / Country	The latest pre-decline year	Index numbers					
		1988	1989	1990	1991	1992	1993
The Balkans							
Bulgaria	1988	100	95	88	80	78	74
Romania	1989		100	84	71	68	66
Yugoslavia	1991				100	92	92
The Baltics							
Estonia	1989		100	92	81	76	66
Latvia	1988	100	94	93	86	80	70
Lithuania	1990				100	95	84
Central Europe							
The Czech Republic	1991				100	93	90
East Germany	1990			100	65	55	52
Hungary	1991				100	95	91
Poland	1991				100	94	90
The Slovak Republic	1991				100	97	94
Slavic States							
Belarus	1989		100	-	89	87	-
Moldova	1988	100	94	90	86	84	80
The Russian Federation	1988	100	94	88	81	73	64
Ukraine	1988	100	94	90	87	82	76

War fertility reduction in Europe?¹⁰ The largest relative reductions in total fertility rates observed in these countries during the five-year intervals coinciding with the first or second halves of the 1970s and the 1980s approached but never got as close as matching or exceeded those experienced by a number of the countries in transition. The steepest decline in western Europe was that of the Dutch total fertility rate during 1970-1975, from 2.6 to 1.7, a level equal to 65 per cent of the 1970 level. The other steepest declines were observed in the former Federal Republic of Germany (a drop during 1970-1975 to 72 per cent of the 1970 level), Spain (73 per cent between 1980 and 1985), the United Kingdom (74 per cent from 1970 to 1975), and in Greece and Italy (75 and 76 per cent, respectively, during 1980-1985). Only the Dutch fertility reduction cited approached that of Russia during 1988-1993. It fell short of the 50 per cent reduction in East Germany, which was compressed into three years, or those reductions observed in Estonia and Romania (66 per cent of the original levels) during the four-year period 1989-1993.

b. Trends in the mean age at child-bearing

Shifts in the mean age of child-bearing associated with changes in overall fertility can tell us whether or not changes in age-specific fertility rates are more pronounced over certain segments of the child-bearing span than others. The decline in the mean age of child-bearing that accompanies a fall in overall fertility typically indicates that drops in age-specific fertility rates at higher child-bearing ages are relatively larger than those at earlier ages. Such declines in the mean age, which historically have been observed during phases of fertility reduction from high to low levels, have been the consequence of reductions in higher order births. In contrast to this, an increase in the mean age, taking

¹⁰ To answer this question, the total fertility rates, provided by the Council of Europe (1994) for dates five years apart between 1970 and 1990 for the 16 medium to large west European countries were used. The total fertility rates for all consecutive years for those countries for the period since the middle of the 1960s were not available to the author at the time of writing. Therefore, it is possible that the present analysis understates the magnitude of fertility declines in this part of Europe during periods of most rapid reduction.

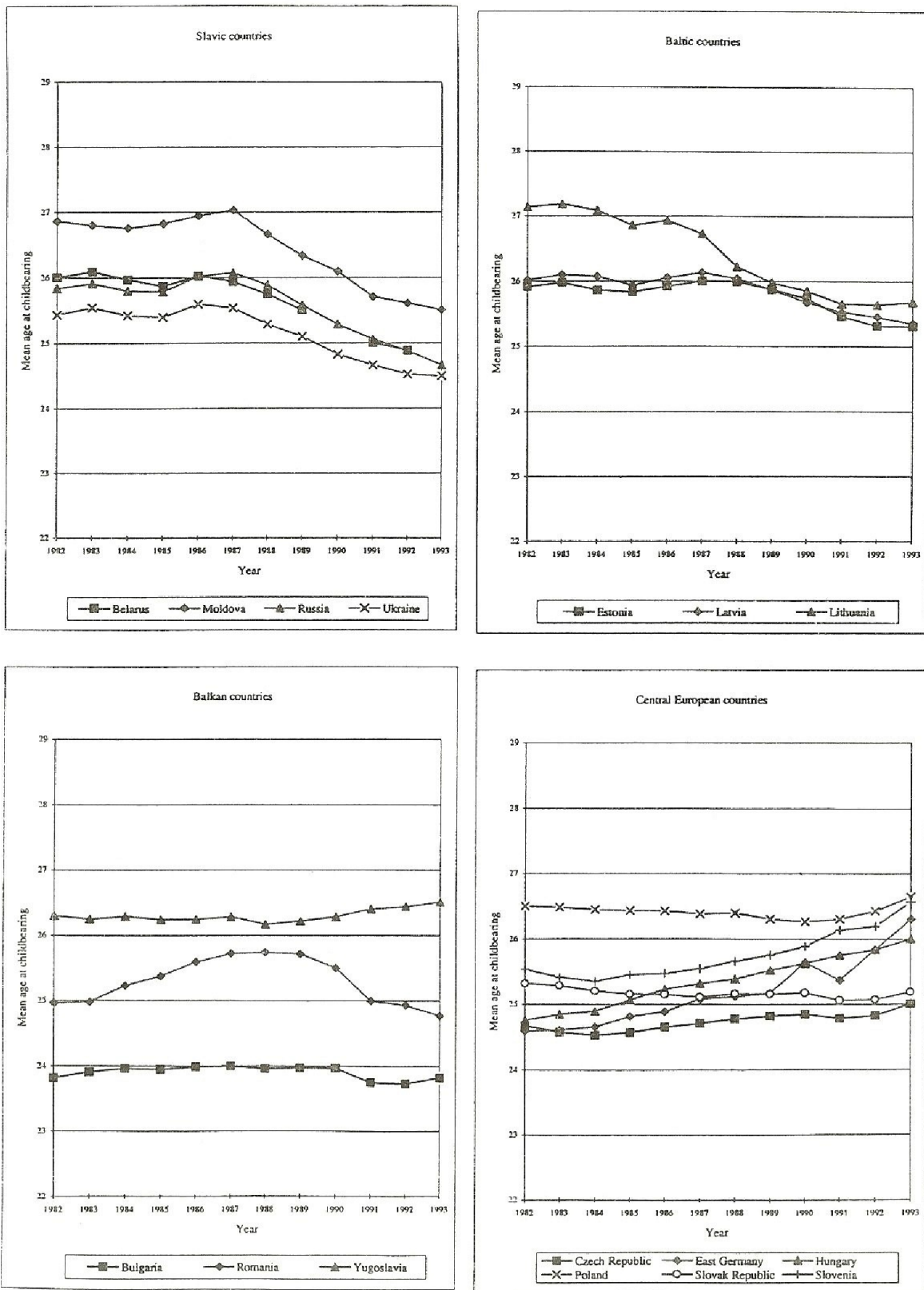
place hand in hand with a drop in overall fertility, suggests relatively faster reductions in fertility rates at earlier child-bearing ages than those at later ages. Such increases in the mean age of child-bearing, observed in a number of west European countries over varying time periods since 1970 have typically resulted from the postponement of entry into unions and/or the delay of the onset of child-bearing.

The changes in overall fertility in the transition countries during 1982-1993 have been accompanied by shifts in the mean age of child-bearing ranging between declines and increases. As with the changes in total fertility rates over this time period, two distinct patterns emerge, the first in the countries in the Baltic and Slavic groups, the other in the Balkan and central European countries (figure 2). The former countries again display a greater degree of uniformity than the latter. Most likely, the reason is that they all once belonged to the same country, the Soviet Union.

In the Baltic and Slavic countries, the mean age of child-bearing remained unchanged or fluctuated slightly from 1982 to 1987 or 1988, after which time a decline set in. The declines were more pronounced in the Slavic countries than in the Baltic countries, amounting to between 4 and 5 per cent by 1993. The only exception to this pattern was the change in the mean age in Lithuania, which kept falling throughout 1982-1991, first slowly, then more rapidly, and then again slowly from 1988, in step with the other two Baltic countries; after 1991 the mean age remained stable. The pattern observed in the former Soviet republics indicates that the fluctuations in total fertility rates along the rising or horizontal trends prior to the onset of rapid declines, was not accompanied by any marked change in the mean age of child-bearing. The rapid fertility declines, however, have been associated with declines in the mean age, indicating that fertility rates at higher child-bearing ages have fallen relatively faster than those at earlier ages. At the prevailing low fertility levels, this suggests more rapid declines in second and third order births, than first order births.

In the Balkan and central European groups, some countries, Bulgaria, Poland, Slovakia, and Yugoslavia, have seen their mean age of child-bearing remain largely stable since 1982. These are the countries that experienced gradual declines in overall fertility during this period and to which women at different child-bearing ages contributed equally.

Figure 2. Mean Age at Childbearing



A partial exception is Bulgaria, where the fertility decline accelerated considerably after 1988, a development associated with a modest drop in the mean age of childbearing signifying larger relative declines at later child-bearing ages. Other countries witnessed increases in their mean age at the time of falling overall fertility (the Czech Republic and particularly Slovenia), fluctuating total fertility rates around a more or less horizontal trend (Hungary), and initially falling fertility, followed by a precipitous drop from 1990 (East Germany); this sharp fertility drop was accompanied by the steepest though uneven increase in the mean age of child-bearing anywhere in the transition countries. In these four countries greater fertility declines were achieved among younger than older women, possibly indicating a postponement in child-bearing. The remaining country, Romania, is an exception, with the mean age initially increasing with the rising total fertility rate, followed by a decline in the mean age at the time of sharply falling overall fertility.

How do these trends in the mean age of child-bearing in the transition countries compare with those in western Europe over the past two to three decades? In some western countries, such as Austria, Belgium, France, West Germany, the Netherlands, Norway, and Spain, the periods of rapid fertility declines have been accompanied by declines in the mean age of child-bearing, which were later replaced by steady increases (Council of Europe, 1994). Thus, there is a parallel between these western countries and the seven transition countries who were once republics of the Soviet Union, to the extent that in both groups rapid fertility declines were associated with increases in the mean age of child-bearing. Some other western countries, including Denmark, Finland, Sweden, Switzerland and the United Kingdom, experienced increases in the mean age of child-bearing since the 1970, sometimes after a period of stagnation, that in certain instances approached 30 years. These countries are in a way similar to the Balkan and central European countries, who witnessed increases in the mean age of child-bearing at the time of falling fertility.

First marriage among women

a. Trends in total first marriage rates

Levels in 1982 and 1993. In practically all transition countries, total first marriage rates were higher, in some countries much higher, in 1982 (or the earliest available year) than in 1993 (or the latest available year). The only exception was Moldova which retained its very high total first marriage rate. The 1982 rates were relatively high by the standards of the industrialized countries of that period. Five of these transition countries had total first marriage rates equal to one or more, three had rates in the range 0.9 - 1.0, five between 0.8 and 0.9, and the remaining two below 0.8. (figure 3). In other words, the majority of the transition countries had period total first marriage rates consistent with universal marriage.

In the western part of Europe, among the 16 market economy countries, only three, two of them in the south - Greece, Ireland, and Portugal - had total first marriage rates in 1980 within the range 0.8 - 0.9.¹¹ All the other countries had their rates below 0.8, with the lowest rates observed in Denmark and Sweden - both equal to 0.53 (Council of Europe, 1994). Six other countries had their total first marriage rates between 0.65 and 0.68, meaning that a continuation of those rates would lead to only about two-thirds of women ever marrying.

By 1993, first marriage patterns in the transition countries were radically different from those in 1982. The four countries of the Slavic group, however, still had total first marriage rates roughly consistent with universal marriage: one had its rate above one, two within the Figure 3, Total first marriage rate range 0.9 - 1.0, and one between 0.8 and 0.9. The remaining transition countries, however, had rates below 0.8. The rates of six of these were around 0.6 or less, on a par with the rates recently observed throughout much of western Europe. The range of total first marriage rates was extremely wide, between 0.35 and 1.05.

¹¹ The rates for these three countries were, respectively, 0.86, 0.83, and 0.81.

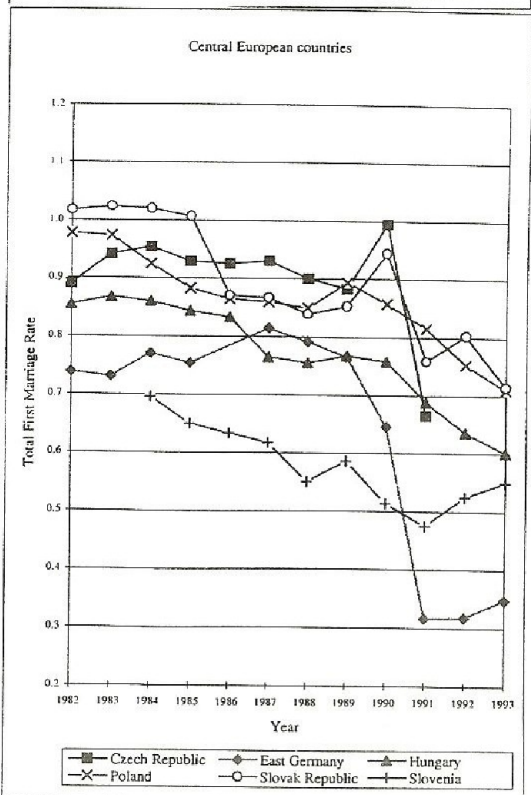
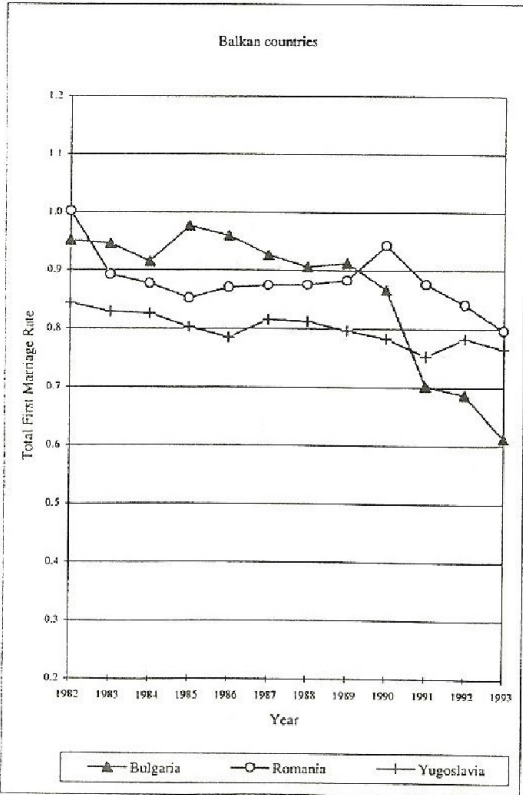
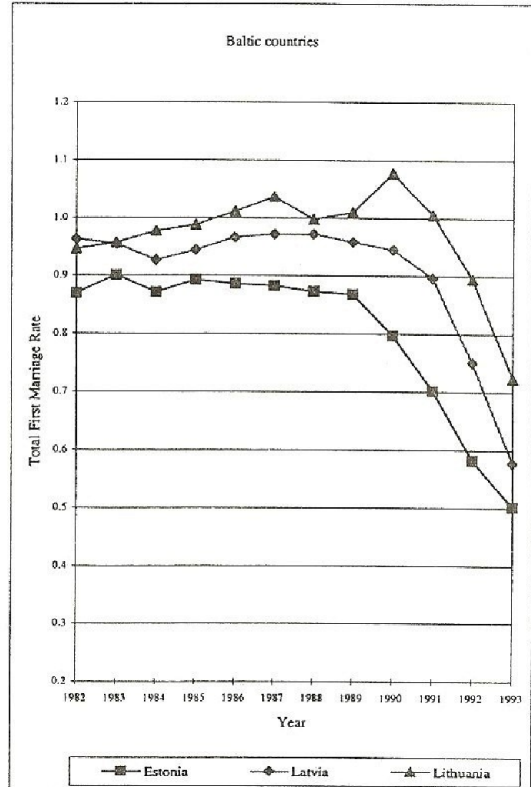
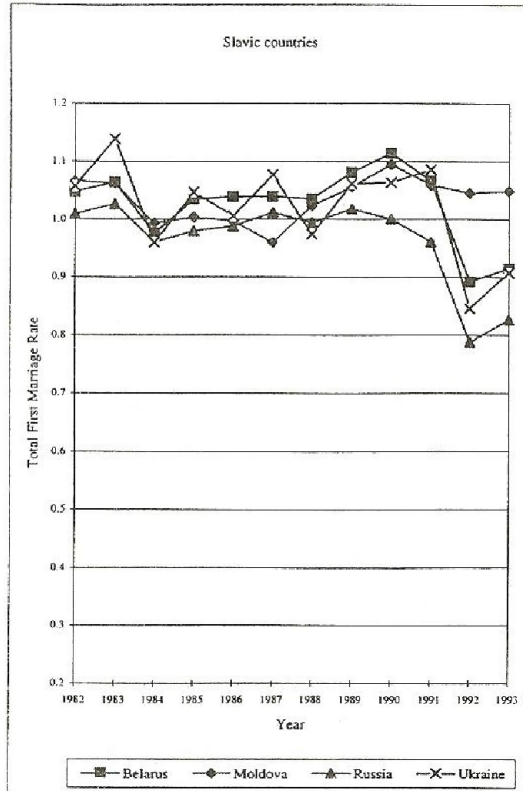
For western Europe, the latest available data indicate a generally low prevalence of first marriage. The highest prevalence was recorded in Portugal in 1993, a country out of step with the rest of western Europe, and with total first marriage rate equal to 0.82. The remaining national rates were between 0.49, the rate reported for Norway for 1991 and that provisionally assessed for France for 1993, and 0.68, the rate estimated for Switzerland for 1993 (Council of Europe, 1994). This part of Europe has become highly homogenous with respect to the prevalence of first marriage, which if continued will result in the proportions ever marrying varying between one half and two-thirds.

Changes from 1982 to 1993. The time patterns of change in the prevalence of first marriage varied greatly across the four groups of countries, and to a certain extent also among countries within some groups. The countries in the Slavic group experienced fluctuations in total first marriage rates in the first few years since 1982, after which the rates followed an upward trend, fluctuating more in some countries than in others (figure 3). Also, the slope of the trend was steeper in some, for example in Ukraine, than in others, such as Russia. The increase in the rates came to an end in 1989, 1990 or 1991, after which dates the decreases began in each of these countries except Moldova. The drops in Belarus, Russia and Ukraine were particularly sharp between 1991 and 1992, after which there were modest recoveries.

The patterns of the Baltic countries had some features similar to those in the Slavic countries. In Lithuania an increase in total first marriage rates occurred before the sharp declines set in, in Latvia the rate fluctuated around a horizontal trend before the decline began, whilst in Estonia there was a barely perceptible decline before it suddenly accelerated. The years prior to the rapid declines ranged between 1989 (Estonia) and 1991 (Latvia and Lithuania). Once the declines were under way, unlike those in the three countries of the Slavic group, they continued without interruption throughout 1993. This is partly why within a few years the prevalence of first marriage in the Baltics matched that of western Europe.

The countries in the Balkan and central European groups traced different patterns of change. These ranged from the steady, faster or slower, declines in Slovenia and Yugoslavia, albeit at different levels, to relatively slow declines followed by sharper or extremely sharp drops in

Figure 3. Total First Marriage Rate (Females)



Bulgaria and East Germany. Among these patterns are also those observed in the Czech Republic, Poland and Romania, which are characterized by initial gradual declines through 1988 or 1989, followed by a one-year upsurge in first marriage - a mild one in 1989 in Poland and more pronounced ones in the other three countries in 1990. The pattern of the Slovak Republic since 1986 is similar to those in the three countries just referred to; prior to this year it is different. These diverse patterns produced, in a number of countries, low total first marriage rates by 1993, the lowest of which was the rate for East Germany.

The timing and magnitude of the recent declines. A number of the transition countries experienced rapid drops in first marriage in 1990 or later. The year of the onset of the rapid decline, and the relative magnitude of the declines by 1993 for 12 countries were assessed using the same approach as the one used in connection with the analysis of the timing and magnitude of the fertility declines. For the four remaining countries, either no rapid declines began by 1993 (Moldova and Slovenia), or they could not be established, possibly due to the lack of information (the Czech Republic and Yugoslavia). The results concerning the latest pre-decline year for each of the dozen countries, along with those regarding the reduction in total first marriage rate in each subsequent year relative to the level for the pre-decline year are shown in table 2. The results may be summarized as follows.

There are no clear differences among the four groups of countries regarding the timing and the magnitude of the decline of first marriage. The rapid declines began in 1990, 1991 or 1992, that is, generally later than the rapid fertility declines. In the two countries where the onset of the decline was the earliest, Estonia and East Germany, the drops in total first marriage rates reached the lowest levels by 1993. In East Germany the decline was extremely steep, within two years the rate was reduced to four-tenths of the 1989 level, after which a slight recovery occurred. The reductions in the Baltic countries were larger than those in the countries of the other groups. Thus in Lithuania, the rate was reduced by nearly 30 per cent within two years. The declines in Bulgaria and Hungary were also remarkably rapid, and within three years approximately 30 and 20 per cent of the pre-decline levels were lost. Interestingly, among the three Slavic group countries, the declines were immediately reversed after the very sharp one-year drops.

Table 2
The timing and the magnitude of the rapid first marriage decline

Group / Country	The latest pre-decline year	Index numbers				
		1989	1990	1991	1992	1993
The Balkans						
Bulgaria	1990		100	81	79	71
Romania	1991			100	96	91
The Baltics						
Estonia	1989	100	92	81	67	58
Latvia	1990		100	95	79	61
Lithuania	1991			100	89	72
Central Europe						
East Germany	1989	100	84	41	42	46
Hungary	1990		100	91	84	79
Poland	1990		100	95	88	83
The Slovak Republic	1991		100	100	106	94
Slavic States						
Belarus	1991			100	84	86
The Russian Federation	1991			100	82	86
Ukraine	1991			100	78	84

Since the declines in first marriage did not begin prior to 1990 and probably have not, in many instances, run their full course, the comparisons of these declines with those that have taken place in western Europe after the middle of the 1960s may be premature. Nevertheless, such a comparison, using the information on the total first marriage rates for the dates five years apart since 1965 for the 16 west

European countries can shed some light on the intensity of the declines in the transition countries. In particular these comparisons show that the declines observed in the early 1990 in East Germany, Estonia, and Latvia, that were compressed within two to four years have not been matched by any declines observed in western Europe over any five-year time period coinciding with the first or second halves of the decades since 1965. The most rapid decline in western Europe took place in Sweden during 1970-1975, where the total first marriage rate was reduced to 63 per cent of the 1970 level. The next most rapid declines were observed in Portugal and Norway during 1975-1980, leading, respectively, to reductions amounting to 64 and 67 per cent of the 1975 levels. The majority of the fastest five-year national declines observed since the middle of the 1960s, expressed in terms of index numbers, were within the range 75 - 90.

b. Trends in the mean age at first marriage

Changes in the mean age at first marriage, taking place hand in hand with those in the prevalence of first marriage can provide an indication as to whether or not the changes in age-specific first marriage frequencies are more pronounced at certain marriageable ages than others. A decline in the mean age at first marriage that accompanies a fall in the prevalence of first marriage typically suggests that drops in age-specific first marriage frequencies at higher marriageable ages are relatively larger than those at earlier ages. In contrast to this, an increase in the mean age taking place along side a drop in the prevalence of first marriage indicates relatively larger reductions in first marriage frequencies at earlier marriageable ages, than the later ones. Such increases in the mean age at first marriage, observed for instance in a number of west European countries at the time of declining total first marriage rates since the middle of the 1960s have typically resulted from the postponement of first marriages.

The changes in total first marriage rates in the transition countries during 1982-1993 have been associated with shifts in the mean age at first marriage ranging from declines to increases. It is possible again to make a distinction between two broad patterns, the first in the countries of the Baltic and Slavic groups, and the other in the Balkan and central

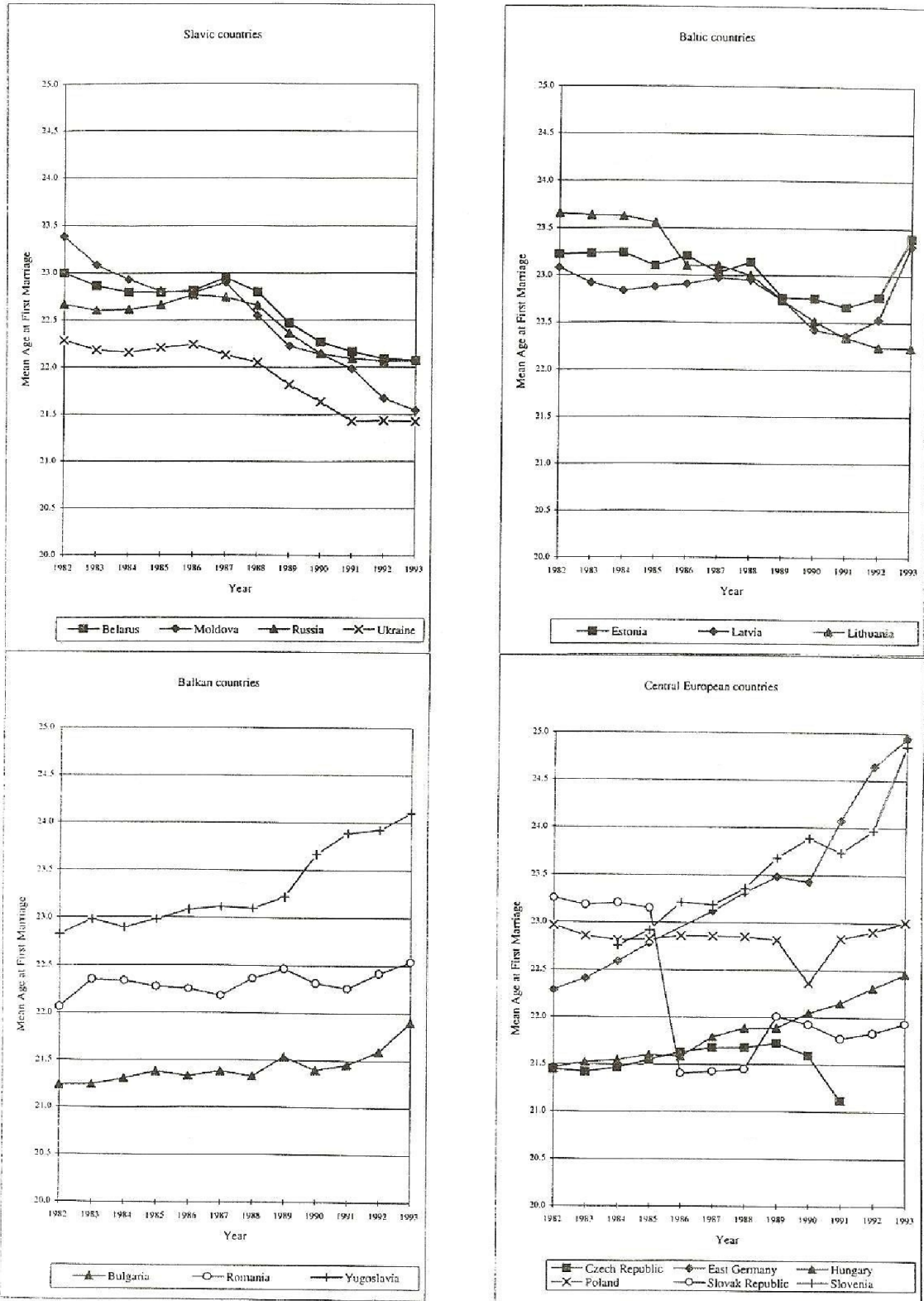
European countries (figure 4). It is, perhaps, not surprising that the first two groups of countries once again display a greater degree of uniformity than the latter ones.

In all the Baltic and Slavic countries, the mean age at first marriage demonstrated a tendency to fall throughout the 1980s, sometimes considerably, and often fluctuating. From around 1990, the decline continued in some countries (Lithuania, Moldova and Russia), was arrested in one (Ukraine), or turned into a slight increase (Belarus), or a very sharp rise (Estonia and Latvia). That is, since the onset of the fall in total first marriage rates in these countries (except Moldova), the mean age at first marriage displayed divergent tendencies. This indicates that, depending on the country, the reduction in first marriage frequencies were relatively larger at later marriageable ages, roughly the same at the different ages, or more pronounced at earlier ages.

In the Balkan and central European groups, a number of countries have seen their mean age at first marriage rise. The fastest increases occurred in Slovenia and East Germany, the less rapid ones in Yugoslavia and Hungary, and a still slower one in Bulgaria, while a hardly perceptible increase took place in Rumania. The Czech Republic witnessed a similar increase in the 1980s, which then turned into a rapid fall by 1991; no information is available for 1992-1993. The Polish mean age at first marriage also recorded no change, except for a temporary dip associated with the one-year rise in total first marriage rate in 1990. The pattern for the Slovak Republic displays a sharp drop in the mean age at first marriage between 1985 and 1986 and a smaller recovery between 1988 and 1989. It is conceivable that in this country the shifts in the total first marriage rate discussed earlier and those in the mean age at first marriage reflect data deficiencies rather than genuine change.

The west European countries have all experienced a U-shaped time pattern of change in the mean age at first marriage since the 1960s (Macura et al., 1994). Following a decline in the mean age, some began experiencing an increase as early as 1967 (Sweden) and others as late as 1984 (Portugal); the mean age of other countries bottomed out between these two dates. In the north, the turnaround was earliest and the subsequent rise fastest. In the south, the switch from the decline to the increase was the latest and weakest. The timing of the turnabout and the speed of the subsequent increase in the remaining countries fell between

Figure 4. Mean Age at First Marriage (Females)



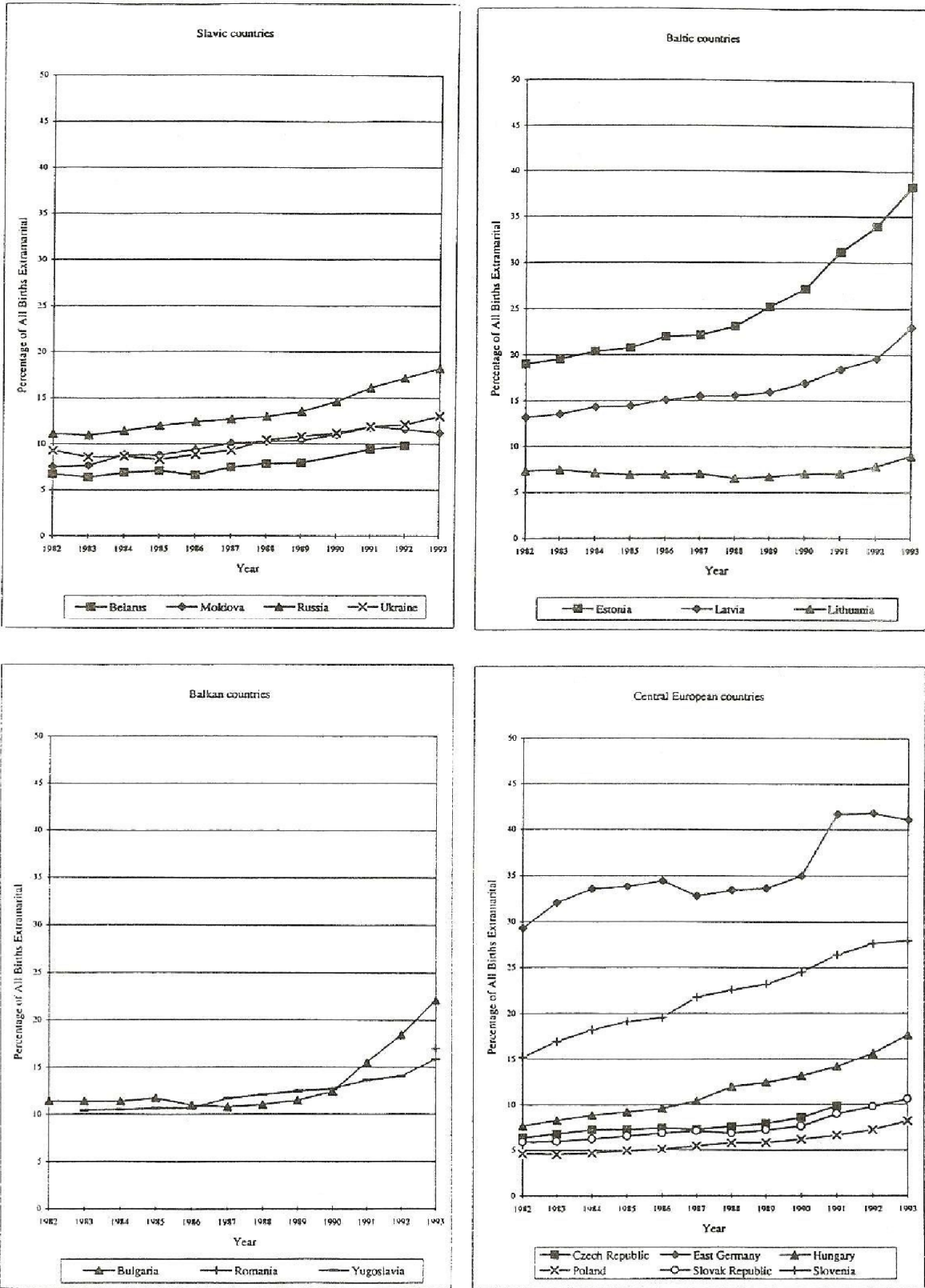
those observed in the north and the south. In many instances, the fall in the mean age preceded the onset of the decline in the prevalence of first marriage, and then accompanied it. In all countries the fall in mean age bottomed out before total first marriage rates reached their lowest levels. These west European patterns of change in the mean age at, and the prevalence of first marriage have been, by and large, paralleled by those observed in the transition countries during 1982-1993.

c. The spread of non-marital cohabitation: indirect evidence

In a number of west European countries, the decline in the prevalence of first marriage since the 1960s took place concurrently with the increase in the prevalence of non-marital cohabitation. An early, indirect evidence of the spread of cohabitation was the increase in the proportion of extramarital births, which rose from relatively low, stable levels reflecting child-bearing among women not living in unions. Later on, when the countries who experienced increases in the proportion of extramarital births began collecting data on the prevalence of non-marital unions, it became obvious that the proportion of extramarital births is a proxy, albeit an imperfect one, for the prevalence of cohabitation. In view of this, the question arises as to whether there is any evidence in the transition countries of an increase in extramarital child-bearing which may suggest that the fall in first marriage has been accompanied by a rise in cohabitation?

Information on the proportion of extramarital births for 14 transition countries, all except Romania and Ukraine, for which the data were not available, indicate that all these countries experienced increases in the prevalence of extramarital child-bearing. In some countries, the increases during 1982-1993 were more modest than in others, below 50 per cent (figure 5). Among the countries with modest increases was East Germany, which, however, had the highest proportion in 1982 (29 per cent) and two other countries, Belarus and Lithuania, with the lowest original proportions (around 7 per cent). Two other of the 14 countries, Estonia and Hungary, saw their proportions more than doubling, from low and relatively high original levels, respectively. The remaining nine transition countries experienced increases ranging between 50 and 100 per cent, starting from low to intermediate levels in 1982.

Figure 5. Percentage of All Births Extramarital



As a result of these shifts, in 1993 or, in some cases, just prior to this year, the proportion of extramarital births in six transition countries stood at below 15 per cent; Poland, possibly due to the influence of the Catholic Church had the lowest proportion of all, 7 per cent in 1992. Among the remaining countries, three - Hungary, Russia, and Yugoslavia - had proportions between 15 and 20 per cent; another two - Bulgaria and Latvia - between 20 and 25 per cent; and three - East Germany, Estonia and Slovenia, above 25 per cent. The order of magnitude of the proportions in Estonia and East Germany was 40 per cent. In a number of instances the relatively high 1993 levels were reached as a result of the acceleration of the increases in the proportion, roughly coinciding with the onset of rapid drops in first marriage. This particularly appears to have been the case in Bulgaria, Russia, and the three Baltic countries. In a few other countries, where there was a steady fall in total first marriage rates through much of the period 1982-1993, the proportions of extramarital births tended to rise steadily; this was the case in Hungary and Slovenia.

This evidence suggests that cohabitation as a substitute for marriage has been on the rise in the transition countries examined since the early 1980s and that the rise has accelerated in countries where recent rapid declines in first marriage occurred. One cannot, however, be certain that the increase in the proportion of extramarital births is a definite indication of the spread of consensual unions, such as those that have emerged in western Europe since the 1960s. It is possible, but by no means certain, that the rising proportions of extramarital births stands both for the emergence of such unions as well as other types of unions formed by relatively small numbers of couples in the West, who have intimate sexual relations, but, for a variety of reasons live separately; this form of living arrangement has become known as "living apart together", LAT. It is quite conceivable, that due to difficult housing conditions in the transition countries some, possibly a sizable proportion, of the non-marital unions are LAT unions.

In western Europe, the prevalence of extramarital child-bearing was generally low around 1970, at the time when its geographic spread was already under way (Council of Europe, 1994). In 1970, only three countries - Austria, Denmark, and Sweden - had proportions of extramarital births above 10 per cent, the proportion for Sweden was the

highest of all, 18.3 per cent. Five countries had proportions of between 5 and 10 per cent, whilst the remaining eight countries' proportions were below 5 per cent. All these countries witnessed increases in extramarital child-bearing, which in some northern countries led to proportions ranging between 40 and 50 per cent in the early 1990s - Denmark (46.6 in 1992), Norway (42.9 in 1992), and Sweden (50.4 in 1993). In some countries, such as Greece, Italy, and Switzerland, the proportion remained very low by west European standards, around 7 per cent or lower. In a few countries, Finland, France, and the United Kingdom, the proportions were close to 30 per cent.

This suggests that in the early 1990s, western Europe was ahead of the transition countries in the prevalence of extramarital child-bearing. It appears, however, from the above discussion on the transition countries that the differences between these two groups of countries might be rapidly narrowing. To the extent that the proportion of extramarital births is a proxy of levels of non-marital cohabitation, the prevalence of cohabitation in the transition countries appears to be closing on that in western Europe. In particular, some transition countries, those that are certainly more westernised than others, such as Slovenia and Estonia, are already on a par with a number of western countries.

Instead of conclusions: the unfinished business

The transition countries are in the midst of a major demographic change, that for the most part appears to have been triggered by the political, economic and social transformation of these societies and, in a number of instances, by the disintegration of the former communist societies that preceded the onset of the transformation. The strength of the changes varies considerably across the countries, quite likely as a consequence of the variations in the depth and breadth of the transformation and the attitude of the people towards it. The changes are likely to have continued during 1994-1995 in a number of these countries, but the information needed to study these further developments is not yet readily available. Future analysis will seek to shed light on them as well as expand the analysis geographically and cover the central Asian and Transcaucasian countries. These extensions will make comparisons with

western Europe more meaningful, which at this stage, can only be provisional, particularly in view of the fact that the developments discussed in this paper have not yet ran their full course in a number of countries.

Apart from extending the analysis in time and geographically, there is a need to address a number of questions, which this paper implicitly poses, and which are anything but trivial. Among the questions - and this is not a comprehensive list - are the following: Why is it that the change in reproductive behaviour preceded that in first marriage behaviour? Why did these two forms of behaviour change earlier in some countries than in others, even though some of the countries in question, such as the Baltics, form what appears to be an homogenous group? Why is it that some countries, such as East Germany, have reacted very strongly to the transformation, while others, for example Slovenia, have hardly reacted at all? How have the political, economic and social changes influenced the demographic trends? In particular, what indicators of these different aspects of change should be considered in attempting to explain the demographic change? What might be the effect of religion, a factor not mentioned in the paper, on the cross-country differences in responses to the transformation? What was the role of contraception and induced abortion in the fertility reduction in the different transition countries? And lastly, how union formation changed during the period of the shifting prevalence of marriage and cohabitation? Needless to say, the paper does not just add to the picture on the recent demographic developments in the transition countries but raises a plethora of issues. Indeed it is perhaps fair to say that it raises more questions than it answers. This is probably to be expected given the state of affairs in current demographic and related research concerning the transition countries.

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Miroslav Macura

**Promene u fertilitetu i nupcijalitetu u centralnoj
i istočnoj Evropi: 1982 - 1993**

Rezime

Zemlje centralne i istočne Evrope nalaze se usred velikih demografskih promena, što je umnogome prouzrokovano političkim, ekonomskim i socijalnim transformacijama u ovim zemljama. Intenzitet tih demografskih promena se razlikuje od zemlje do zemlje, najverovatnije kao posledica varijacija u jačini i rasprostranjenosti transformacija, kao i odnosa ljudi prema njima. Trebalo bi da prodje još najmanje nekoliko godina pre nego što demografi budu u stanju da stvore potpunu sliku demografskog razvoja u ovim zemljama od zaokreta u 1980-im. Ovaj rad ima za cilj da doprinese stvaranju te slike tako što u više od pola zemalja u tranziciji kroz vreme prikaže promene u fertilitetu i prvoj bračnosti, za koje se ispostavilo da su povezane sa političkom i ekonomskom transformacijom. Centralni deo analize je usmeren ka definisanju promena nivoa i starosnog modela kada je u pitanju ukupan fertilitet i prva bračnost kod žena tokom 1982-1993. Cilj rada nije da objasni na koji su način različiti aspekti transformacije mogli da utiču na pomenute promene; ovo bi zahtevalo posebnu analizu. S obzirom da su u analizu uključene i godine koje su neposredno prethodile početku transformacija, želimo da odgovorimo na sledeća pitanja: Kakva je priroda i intenzitet promena u ukupnom fertilitetu i prvoj bračnosti, koje su respektivno merene stopom ukupnog fertiliteta i stopom prve bračnosti? Da li su promene u prvoj bračnosti praćene onima u vanbračnim zajednicama? Iako samo po sebi interesantno, ovo pitanje je zbog nedostupnosti podataka postavljeno kao sporedna tema i posmatrano kroz udeo vanbračnih rodjenja. I na kraju, da li su se dogodile i promene u starosnom modelu kada je u pitanju ukupan fertilitet i prva bračnost, što je mereno prosečnom starošću žene pri radjanju dece i prosečnom starošću žene pri ulasku u prvi brak, respektivno? Analiza je usmerena i na širi evropski kontekst, tako što su pravljeni poredjenja između zemalja sa ekonomijama u tranziciji i izabраних evropskih zemalja sa tržišnim ekonomijama.

Ključne reči: *fertilitet, nupcijalitet, centralna i istočna Evropa*

Miroslav Macura

**Fertility and nuptiality changes in Central
and Eastern Europe: 1982 - 1993**

Summary

Central and east European countries are in the midst of a major demographic change, that for the most part appears to have been brought about by the on-going political, economic and social transformation of these countries. The strength of the change varies considerably across the countries, quite likely as a consequences of the variations in the depth and breadth of the transformation and the attitude of the people towards it. It appears that, at least, a few years will elapse before the demographers studying these countries will be able to draw a relatively comprehensive picture of the demographic developments in these countries since the turn of the 1980s. This paper seeks to contribute to this picture by documenting changes over time in fertility and first marriage in more than half of the transition countries, which appear to have been associated with the transformation under way. The analysis focuses on the time patterns in the levels and timing of overall fertility and first marriage among women during 1982-1993. It does not seek to explain how the various aspects of the transformation might have influenced those patterns; this would require a separate analysis. Having included in the analysis several years prior to the onset of the transformation, we seek to answer the following questions: What were the nature, timing and magnitude of the changes in overall fertility and first marriage, which are respectively measured by the period total fertility rate and the period total first marriage rate? Were the changes in first marriage accompanied by those in non-marital cohabitation? Although interesting in its own right, this question is addressed as a side issue due to data limitations, by looking at the proportions of extramarital births. And lastly, were the shifts in overall fertility and first marriage accompanied by those in their timing, as measured by the mean age of childbearing and the mean age at entry into first marriage, respectively? The analysis is cast within a broader European context by making comparisons between the countries with economies in transition and selected European countries with market economies.

Key words: *fertility, nuptiality, Central and Eastern Europe*