

CHAPTER 9

CONCLUSIONS

Women and men across Europe have been entering parenthood at ever-higher ages. This process has important consequences for period fertility trends and demographic change in general, which in turn have many societal implications. Focusing mostly on fertility change at an aggregate level, this study has utilised a broad array of data to map the progression of fertility postponement in Europe, and to link it with very low period fertility rates in a number of European countries. Another two topics thoroughly addressed in this study—the precipitous fertility changes in Central and Eastern Europe during the 1990s and the analysis of final childlessness—are also closely linked with the effects of the ongoing deferment of parenthood. Methodological discussion in this study has concentrated on the measurement of period fertility, in particular on the possibilities of how to take into account tempo-effects, i.e., distortions which fertility postponement or advancement causes in the period fertility indicators commonly used. Given the relatively broad scope of this research, addressing the most pertinent features of contemporary fertility trends in Europe, many issues discussed here deserve further attention and would benefit from a detailed cross-country comparative study using micro-level life history analysis.

This concluding chapter first summarises the central findings of this study. The next section outlines the main insights for formulating medium-term fertility projections, especially within the framework of the conventional total fertility rates. The subsequent section discusses selected individual and societal implications of the shift towards the late timing of childbearing. The last section provides suggestions for further research and concludes the thesis.

9.1 SUMMARY OF CENTRAL FINDINGS

9.1.1 Determinants of first birth postponement and its progression in Europe

Educational expansion and the resulting prolongation of the period spent in education among young adults appear to be the most important forces fuelling the deferment of family formation and childbearing. However, theoretical insights and various empirical studies point out that fertility postponement has multiple roots and cannot be explained by a single factor. Besides the effects of extended educational attainment, Chapter 2 reviewed other factors commonly identified as the main determinants of first birth postponement—the conflict between employment and motherhood, the individual and societal impacts of uncertainty, the widespread adoption of the contraceptive pill, and profound changes in the character of intimate relations. The norms related to childbearing have changed considerably; the

importance of family relationships and parenthood in people's lives has declined and the norms on the proper timing of childbearing have become less rigid. At the same time, the perceived preconditions for parenthood have gained in importance: finishing education, establishing oneself on the labour market, having a stable relationship, and accumulating enough resources are the four main 'preconditions' for parenthood to which most men and women adhere. In addition, the standards of material security prior to parenthood have increased considerably, while partnerships have become more fragile, making the decision to have a child more difficult. For many individuals, postponing childbearing constitutes a well-accepted solution to the perceived incompatibility of their current lifestyle with parenthood.

From a general perspective, the profound transformation in the way people organise their lives, mirrored in the changes in living arrangements, partnership, and intimate behaviour, as well as in values and preferences related to family and childbearing, undoubtedly constitutes the key element for understanding the massive fertility postponement in Europe. This underscores the importance of a life-course approach in analysing the trend towards delayed childbearing and provides a link to the concept of the second demographic transition.

The empirical evidence presented in Chapter 3 maps the long-standing trend towards later timing of parenthood. The persistence of the ongoing first birth postponement is unique when compared with the other two major shifts in fertility tempo in industrialised countries in the 20th century—fertility delay during the economic depression of the 1930s and fertility advancement during the 1950s and the 1960s. The onset of the current shift towards later timing of first births proceeded across Europe in three distinctive waves, starting in Western and Northern Europe in 1971-1973, and encompassing most countries of Central and Eastern Europe in 1992-1995, shortly after the collapse of their centrally planned communist economies. The Netherlands is the only European country where first birth postponement has come to an end, at least temporarily, since the late 1990s.¹ France, Ireland, Italy, the Netherlands, Sweden, Spain, and Switzerland form a heterogeneous group of countries characterised by the latest timing of motherhood, where women give birth to a first child above age 28 on average. Spanish and, most probably, Italian women (for which no recent data are available) currently hold the problematic record of being the oldest first-time mothers in Europe and arguably in the world.

Age-heterogeneity in first birth timing has increased in all societies and implies a widening stratification between different social groups. The usual indicators, such as the mean age at childbearing, have thus become less indicative of 'typical' behaviour. This evidence runs contrary to the idea proposed by Kohler, Billari, and Ortega (2002), who envisioned a concentration of childbearing into a relatively narrow age interval. While a number of women are postponing childbearing to ever-later ages, and while first birth rates have been increasing

¹ The most recent data for 2003 record a slight increase in the mean age at first birth among Dutch women (CBS 2004), indicating the possibility of renewed, albeit gradual, postponement of first births.

even among women past age 40, many countries including Ireland, the United Kingdom, and most of Central and Eastern Europe still have a sizeable ‘subculture’ of women bearing their first child during their teenage years. The findings on cross-country differences are less conclusive: a slight decline in heterogeneity after 1995 constitutes a trend reversal which may be attributed to the accelerated fertility postponement in many post-communist countries, converging somewhat to the late childbearing pattern elsewhere in Europe. Fertility tables indicate that some ‘recuperation’ in first birth intensity among women at higher reproductive ages has been in progress nearly everywhere. This trend has only begun recently in Central and Eastern Europe and has not yet taken place in Poland. The differences between countries are considerable in this respect; the evidence from Denmark, the Netherlands, Norway, Spain, and Sweden shows that first birth intensity may remain high after age 30. Given the age-specific first birth probabilities recorded in these countries around the year 2000, at least 60% of the women who remained childless when reaching age 30 will ultimately give birth to at least one child.

9.1.2 Methods for analysing period fertility in times of rapid shifts in fertility timing

The commonly used indicators of period fertility, namely the total fertility rate and age-specific incidence rates, are strongly distorted by shifts in the timing of childbearing. This distortion is manifested by profound and long-lasting differences between period and cohort total fertility rates (Chapter 4) and has been illustrated by a simulation of the change in first birth tempo and quantum presented in Chapter 3 (Section 3.5). Given that the intensity of fertility postponement differs across countries, the recorded levels of total fertility rates not only misrepresent the level of fertility (fertility quantum), but also provide a misleading impression of the extent of cross-country differences and the ranking of individual countries. None of the available alternatives closely examined here—exposure-specific indicators and two methods attempting to provide adjustment for deficiencies in the commonly applied period fertility measures—constitutes a ‘perfect’ method of choice for measuring fertility quantum. A similar conclusion holds for the problematic question of whether the particular ‘alternative’ period indicators, by eliminating some distortions present in the period TFR, come systematically closer to the levels of completed cohort fertility (see Chapter 4).

First of all, the ability of individual indicators to capture period fertility quantum varies by birth order. Exposure-specific indicators, which may be organised within the framework of fertility tables, provide a relatively good alternative to incidence rates in the case of first births. Although they are also distorted by tempo-effects, this distortion is rather small when compared with the total fertility rates. Besides better reflecting the period first birth quantum, exposure-based data depict the period recuperation among women past age 30 (see Chapter 3), reveal changes in first birth timing (Chapter 3, Section 3.3), and enable the formulation of realistic projections of final childlessness (Chapter 5). The relatively complex adjustment proposed by Kohler and Ortega (2002, 2002a) takes the tempo-effects in

exposure-specific data into account and produces a suitable indicator of first birth quantum, characterised also by its surprisingly good performance in the retrospective projections of final childlessness featured in Chapter 5.

When fertility postponement takes place, exposure-specific measures of period fertility do not reflect fertility quantum better than the indicators based on incidence rates in the case of birth order two and higher. For birth orders three and higher, the exposure-specific index of total fertility is typically below the level of the total fertility rates, implying even more intensive tempo distortions. Various adjustments may provide an alternative for estimating period fertility quantum. However, the indicator proposed by Bongaarts and Feeney (1998) and, for higher birth orders, the more sophisticated measure advocated by Kohler and Ortega (2002), depict considerable fluctuations that seem to reflect the deficiencies of these approaches rather than the shifts in the underlying fertility quantum.

Overall, the fertility adjustment methods appear to be more suitable for expressing the total quantum of fertility. Although the Bongaarts-Feeney method is based on overly simplifying assumptions, it usually provides estimates of fertility quantum that are close to those provided by the complex Kohler-Ortega adjustment. When the more detailed data are not available and the time series are smoothed in order to limit random fluctuations, the Bongaarts-Feeney method may give approximate estimates of period fertility quantum (see Chapters 6 and 7). However, caution is necessary in interpreting these results, especially in the case of individual countries.

9.1.3 Explaining low and very low fertility in Europe

Since the early 1990s, an increasing number of European societies have faced rapidly declining birth rates, plummeting to extremely low levels. In 2001, when this trend peaked, fifteen countries, representing 57% of Europe's population, had reached the 'lowest-low' fertility level, expressed by total fertility rates below 1.30. The evidence presented in Chapter 6 suggests that extremely low levels of period fertility can be attributed to the distortions caused by fertility postponement. The tempo-adjusted fertility rate, presented for 26 countries of Europe, remained in all cases well above the lowest-low fertility threshold during the second half of the 1990s. In other words, the presented results show that none of the European countries analysed would have reached the extremely low period fertility level in the absence of fertility postponement. I interpret this finding as an indication that lowest-low fertility is a temporary phenomenon driven by intensive fertility postponement. Although further decline in fertility quantum cannot be ruled out, most European societies are likely to experience some recovery in period fertility rates once the postponement of childbearing comes to an end. Such a moderate recovery has recently taken place in the Netherlands, where fertility postponement stopped in the late 1990s. However, period and cohort fertility in virtually all European societies will remain considerably below replacement level, and pronounced differences in fertility quantum between European regions will prevail. Austria, Germany,

Switzerland, most of Southern Europe, Bulgaria, Romania, and the European countries of the former Soviet Union, constitute a diverse group of countries with low fertility quantum, which may face serious consequences in terms of population ageing and the potential magnitude of population decline. Nevertheless, positive migration balance might moderate the future decline in population size.

9.1.4 The trends and projections of final childlessness

Since both ideal and realised family size have become small, most typically centring on two children, cross-country variability in first-order fertility and final childlessness are crucial for explaining differences in period and cohort fertility quantum across Europe. Projection scenarios of final childlessness in sixteen European countries and the United States envision a pronounced increase of childlessness in Central and Eastern Europe, where it has been uncommon until recently. Although cohort childlessness is set to increase in almost all the countries analysed, it is unlikely to exceed the very high level of 30% reached in many societies among women born at the beginning of the 20th century. According to the upper-bound scenario, 23 to 28 percent of women born in 1975 will remain childless in the countries and regions with the highest levels of projected final childlessness—Austria, England and Wales, Finland, West Germany, Italy, and Poland; the lower-bound scenario puts this proportion at 22-23 percent. Among the countries with the lowest projected childlessness—Estonia, France, Norway, and the United States (as well as the Czech Republic and Hungary, according to the lower-bound scenario), 10-15 percent of women born in 1975 will remain childless. The most surprising is the projected slight decline of final childlessness in the United States, which strongly contrasts with European trends and is seemingly at odds with the observed increase in tolerance towards voluntary childlessness, greater attractiveness of employment among women, and the declining importance of family and parenthood in people's lives.

9.1.5 The rapid transformation of fertility patterns in Central and Eastern Europe

The profound fertility decline after the breakdown of the state-socialist systems in Central and Eastern Europe was unanticipated. It has considerably changed the European fertility map: within a decade, Central and Eastern Europe has been transformed from being a 'high-fertility' region in Europe into the region with the lowest period fertility in the world, at least when measured by the commonly used total fertility rates. Chapter 7 analysed this decline in detail and challenged the widely shared view that the plummeting fertility rates in this region constituted a relatively uniform 'shock' reaction to the ongoing social and economic transformation there, identifying considerable regional differences in the path towards very low period fertility levels. In Central Europe and, to a lesser extent, in the Baltic countries, the decline in period total fertility has been dominantly driven by the massive postponement of

childbearing, whereas reduction in fertility quantum has been less prominent. In contrast, in the remaining European successor states of the former Soviet Union—Belarus, Moldova, Russia, and Ukraine—there was hardly any postponement until the late 1990s, and the fertility decline was driven mostly by the reduction in fertility quantum. In these countries, as well as in Bulgaria and Romania, the progression rates to second birth declined considerably, implying a rapidly growing proportion of one-child families. An analysis of data on fertility, reproductive behaviour, family formation, and birth control further revealed rapidly growing differences across Central and Eastern Europe. Whereas most of the analysed developments, such as the rise of extra-marital childbearing, fertility postponement, the sexual and contraceptive ‘revolutions,’ or the spread of non-marital cohabitation have proceeded rapidly and in a similar direction as in ‘Western’ societies since the early 1970s, there have also been substantial regional contrasts in the progression of these changes. This re-emerging diversity has been influenced not only by rapidly increasing cross-country disparities in terms of living standards and social and economic development, but it has also been fuelled by traditional cultural fault lines, differences in religiosity, and country-specific institutional factors.

Chapter 8 examined the most prominent factors shaping the ongoing transformation of fertility in Central and Eastern Europe. It attributed the distinctive fertility regime prevailing in this region until the late 1980s—such as the early timing of childbearing, the low levels of childlessness, the high reliance on abortions, and relatively uniform fertility pathways—to the specific institutional and economic settings of the communist societies. Although acknowledging the role of the profound economic crisis experienced by many countries after the regime change around 1990, the discussion of the recent fertility shifts focuses mostly on social and economic changes that are likely to prevail. The roots of the massive fertility changes in Central and Eastern Europe are generally similar to those in other European regions. In particular, massive education expansion, the opening of new opportunities for self-realisation, the rapid spread of the contraceptive pill, the culture of consumption, and the changing character of the family, as well as the intensifying conflict between employment career and parenthood, constitute the main factors shaping fertility changes in the post-communist countries of Europe. Most of them are experiencing a rapid shift toward a model of late timing of parenthood, higher childlessness, lower fertility quantum, and increased heterogeneity in family size and fertility timing typical of other regions in Europe. Interestingly, fertility postponement has been most pronounced in countries that have undergone the most successful economic and social transformation and which have moved most rapidly towards the institutional framework of the established market democracies in Europe. This finding together with the limited evidence based on individual data, which links the prevalence of early childbearing to lower-educated and economically disadvantaged social groups, challenges to some extent the widely accepted view of social and economic uncertainty as a catalyst of massive fertility postponement.

9.2 MAIN INSIGHTS FOR FERTILITY PROJECTIONS

The past failures of many fertility projections have engendered a considerable degree of scepticism concerning the issue of whether knowledge based on theories and analysis of past trends can improve fertility projections or population projections in general (e.g. Keyfitz 1982). The main potential contribution of this study for formulating projections of fertility change in Europe lies in its explicit consideration of tempo effects in period fertility and in its attempts to distinguish between the tempo and quantum components of fertility change. Focusing on a medium-term perspective of the next 20 years (i.e. until 2025), this section outlines the most important insights regarding future changes in fertility quantum, fertility tempo, the issue of convergence, and evolving regional fertility patterns in Europe. The time horizon of two decades constitutes a sufficiently long period to expect the process of fertility postponement to come to an end even in countries where it has started relatively late.

9.2.1 Future ‘recovery’ in period fertility rates (fertility quantum)

Considering biological limitations to fertility postponement and the considerable age heterogeneity in first birth timing which is increasing almost everywhere (see Chapter 3), many European societies may be approaching the end of fertility postponement, or at least a significant slowing-down of this process (see the next subsection). Different chapters throughout this study depicted the extent to which the usual indicators of period fertility are negatively affected by the ongoing increase in the age at childbearing (see Chapters 4, 6, and 7). What are the most important insights regarding the level of fertility quantum over the next two decades?

Some recovery of period fertility rates will probably occur in all analysed countries

Much of the existing evidence shows that a future ending of fertility postponement, which will eliminate the influence of tempo-effects, will be associated with a significant increase in period total fertility rates and, consequently, in the total number of births. This development was sketched out in a simplified model of fertility postponement and recuperation in Chapter 3 (see Section 3.5.2, Figure 3.13) and was also illustrated in the simulation of change in first birth rates (Section 3.5.1).

In most societies, the ‘trough’ in period fertility rates has already been reached

Recent data on period fertility suggest that most European countries have already reached the ‘trough’ in period total fertility. Accordingly, the number of countries with the lowest-low fertility level (TFR below 1.3) probably peaked in 2001 (see Chapter 6). These findings might be explained by a declining intensity of fertility postponement in all regions of Europe except the post-communist societies of Central and Eastern Europe (see Chapter 3 and the next section).

In all but a few countries, the increase in the total fertility rates will not be strong enough to bring back replacement-level fertility

How strong might be the future increase in birth rates across Europe? To start with the upper ceiling, it is obvious that with a few exceptions, the total fertility rates in most European societies will remain below the 'replacement level' threshold. This is indicated by the highest estimated levels of quantum-adjusted TFR in 1995-2000 (see Chapter 6, Table 6.2), at 1.96 in France, and between 2.0 and 2.2 in Denmark, Ireland, Macedonia, and Norway. Furthermore, the mean ideal family size among young women in most European countries stays slightly above two children per woman (Goldstein, Lutz, and Testa 2003). Since fertility intentions have been repeatedly found to reflect 'unrealistic optimism' among couples with regards to their childbearing plans, fertility rates in almost all developed countries considerably deviate from desired family size and, as a rule, this deviation is negative (Bongaarts 2001). Consequently, the TFR of 2.2 or the mean value of an ideal family size among women aged 20 to 34 in the cases when it is below this level (particularly in Austria and Germany) might constitute the uppermost ceiling for the possible recovery in total fertility rates.

Lowest-low fertility appears to be a temporary phenomenon

The lowest-low fertility threshold, i.e. the TFR of 1.3, might constitute the lower ceiling for the future fertility recuperation. Tempo-adjusted TFRs in all countries analysed in Chapter 6 have been well above this level and it is unlikely that the 'underlying' fertility quantum will drop to such a low level for a long period of time in the foreseeable future.

Recent estimates of period fertility quantum may serve as a starting point in formulating country-specific scenarios

The scenarios of period fertility may be constructed from the scenarios of order-specific fertility measures or parity progression ratios. Alternatively, they may be derived from the recent estimates of total period fertility quantum. When a limited amount of data is available, the values of the adjusted TFR for the recent period of three to five years—as estimated in Chapter 6—may suffice for a basic outline of country-specific period fertility trajectories. Two baseline scenarios might be envisioned: (1) the higher-fertility scenario, assuming that the fertility quantum, as captured in the recent estimates of the adjusted total fertility, will remain stable and (2) the lower-fertility scenario, assuming only a partial fertility 'recovery' and implying thus a decline in fertility quantum in the future (see also Bongaarts 2002: 437-438). Both scenarios encompass a possible future of European fertility. On the one hand, fertility quantum appears to have stabilised in a number of countries since the early 1980s. For instance, the recent moderate increase in total fertility rates in the Netherlands (see Chapter 4 and Chapter 6, Section 6.6) showed that the TFR may indeed 'recuperate' close to the levels which were previously indicated by tempo-adjusted measures. On the other hand, many countries, especially in Central and Eastern Europe, will probably experience a further

decline in fertility quantum and are unlikely to see an increase in period total fertility to the recently recorded fertility quantum as expressed by various adjustment indicators.

Considering parity makes projections more reliable

Whenever possible, fertility scenarios should utilise parity-specific data. The parity-specific approach is consistent with the fact that fertility is a sequential process and addresses the concern of some scholars (e.g. Wilson 2001: 538-539) who cautioned against reducing variation in childbearing to one measure of central tendency. Tempo effects are strongest in the case of first birth order (see Chapters 4 and 7) and, at the same time, the 'catching up' is likely to be most pronounced in first birth rates (see Chapters 4 and 5). This is consistent with findings on the continuing strong motivation for parenthood discussed briefly in Chapter 5 (Section 5.6.2). Higher-order fertility rates (third and later births) are unlikely to increase much once fertility postponement stops; the increase in the mean age at childbearing is usually slower at higher birth orders, and the late timing of first births provides too little leeway for many women to give birth to more than one or two children.

9.2.2 The changes in fertility tempo: When will fertility postponement stop?

Because changes in fertility tempo generate shifts in the number of births and the usual indicators of fertility quantum, realistic assessment of trends in the timing of childbearing is essential for plausible projections of period fertility. In other words, the scenarios of the future period total fertility rates are strongly dependent on the expected intensity of fertility postponement, as well as the year when the postponement is expected to end. The 'recovery' in period fertility may occur within a short period of several years, concomitant with the stabilisation of the mean age at first birth.

Limits to the increasing age at first birth

The data for Spain, a country with the 'latest-late' first birth pattern, with the mean age at first birth approaching 30 (see Section 9.2.1 above), indicate that women in most European societies still have considerable scope for further deferment of childbearing. This is particularly so in the post-communist countries of Central and Eastern Europe, where women were bearing children at an early age until recently. Chapter 3 (Section 3.6) has speculated that given the current large social differentials in first birth timing, the mean age of 32 appears to be the upper limit for the record-late first birth pattern. It is unlikely that many countries would reach such a late schedule of first birth timing. This development would imply that even societies with currently late first birth timing (mean age around 28) could face a continuation of fertility postponement for another 10-15 years.

In Western, Northern, and Southern Europe, the pace of fertility postponement is likely to slow down markedly

Chapter 3 (especially Figure 3.5) pointed out that the intensity of fertility postponement in Western, Northern, and Southern Europe peaked in 1990-95 and subsequently slowed down in 1995-2000. In these regions, first birth postponement is likely to become gradual in the next five years and more countries will probably record stabilisation of the mean age at first birth among women.

Central and Eastern Europe is likely to experience further intensive delay of childbearing

Despite the ongoing increase in the mean age at first birth, women in Central and Eastern Europe still enter motherhood at considerably younger ages than their Western European counterparts. The very intensive fertility postponement in the Baltic countries and Central Europe is likely to continue for at least 5 to 10 years, bringing fertility timing close to the current level of Western and Northern Europe and sustaining very low period total fertility rates in this region. The former GDR and Slovenia are notable exceptions: they have already reached the late pattern of first birth timing; consequently, the pace of fertility postponement there is likely to decline considerably in the near future. The changes in South-eastern Europe and especially in the post-Soviet countries are more difficult to envision. Postponement in the former Soviet Union may proceed at a lower intensity, given its cultural and economic differences from the rest of Europe. Alternatively, accelerated fertility postponement might bring long-lasting extremely low levels of period total fertility.

Trend reversal towards earlier childbearing pattern is unlikely

Although it is possible to envision policies that aim towards facilitating earlier timing of parenthood by reducing the age at finishing education or attenuating the incompatibility of childbearing and a work career, a significant trend reversal towards earlier timing of parenthood is very unlikely to occur. Such a trend would imply a reconsideration of the current norms on the preconditions for parenthood and, probably, a more radical change in people's lifestyle, as well as in the social and economic set-up of European societies (see also Section 9.4 below).

9.2.3 Future European convergence in fertility tempo and quantum?

The issue of cross-country convergence in fertility timing and quantum was repeatedly brought forward in Chapters 3, 6, and 7. The main findings of these analyses and discussions may be summarised as follows.

Further convergence towards the late-fertility pattern is plausible

As the increasing age at first birth has been recorded in virtually all European societies and many countries with previously early timing of first birth are experiencing particularly

intensive fertility postponement, a convergence of European countries towards a late childbearing pattern, represented currently by Italy, the Netherlands, Spain, and several other countries, is plausible. Such an expectation is consistent with the above-outlined scenario of gradual slowing-down in the intensity of postponement in Western, Northern, and Southern Europe, and an accelerated pace of fertility postponement in Central Europe and the Baltic countries. It is also in line with the view of fertility postponement as a 'transition' from an early to a late pattern of first birth timing, advanced by Kohler, Billari, and Ortega (2002).

Diversity in fertility quantum is likely to persist

Both adjusted and unadjusted indicators of fertility quantum suggest a continuing diversity in fertility levels across Europe. The inspection of adjusted total fertility rates in Chapter 6 showed that only a smaller part of cross-country differences in total fertility is eliminated when tempo effects are considered. Similarly, the analysis of childlessness in Chapter 5 and order-specific differences in period fertility in Central and Eastern Europe in Chapter 7 point out a considerable diversity in the parity-specific patterns of fertility quantum. Thus, the 'Uniformity' scenario of a convergence in fertility quantum in European countries towards a common fertility level, such as that outlined alongside the 'Diversity' scenario by de Jong and Broekman (1999), is very unlikely to materialise in the foreseeable future. Although the differences in fertility rates in the order of 0.5 children per woman might seem unimportant from a global perspective, they are of crucial importance in the low-fertility context and will have strong implications for the future pace of population growth. The evolving lower vs. higher fertility divide in Europe depicts consistent regional patterns, which are further explored in the following section.

Central and Eastern Europe will not return to the previous fertility model

Although it is possible to identify distinct regional fertility patterns across Europe, which will probably persist in the future (see also the next section), post-communist societies are very unlikely to return to the model of fertility behaviour prevailing there until the late 1990s (see Chapter 8, Section 8.2). These relatively uniform reproductive patterns are not compatible with the character of contemporary market economies and the pronounced social stratification that has taken place after 1990.

9.2.4 Outlining regional patterns of fertility tempo and quantum

Many European countries display similar patterns of fertility tempo and timing as well as remarkably similar trends over time (see Chapter 3 and 6). For instance, the almost identical changes in Italian and Spanish period fertility since the early 1980s are puzzling, given the considerable regional differences within these two countries. The main evolving regional divisions in European fertility may be sketched out as follows.

The 'high-fertility' countries of Northern and Western Europe

Three Northern European countries—Denmark, Norway, and Sweden—together with France and Ireland form a 'higher-fertility belt' in Europe. Except for Ireland (see below), they are characterised by a late pattern of first birth timing, lower rates of final childlessness (10-15%), and moderate to higher levels of progression towards third birth. Consequently, total fertility rates here may 'recuperate' to the levels close to the 'replacement' threshold, i.e. to 2.0-2.1. Belgium, the Netherlands, and Finland share similar patterns, although they have higher rates of childlessness (15-20%) and somewhat lower quantum of fertility. The future fertility 'recuperation' might bring the total fertility rates in these societies close to the level of 1.8.

Ireland and the United Kingdom

These two countries share considerable polarisation in fertility tempo and quantum, characterised by high levels of final childlessness, relatively high progression rates to third births (in Ireland also to higher-order births), and elevated levels of teenage fertility which contrast with a high proportion of women who enter motherhood at late ages. Ireland has a very high fertility quantum by European standards (the adjusted TFR was 2.2 in 1995-2000), supposedly supported by more traditional family values and the influence of Catholicism. The United Kingdom too has a relatively high level of fertility quantum. Since both countries record a large proportion of unwanted and 'mistimed' pregnancies and births, especially among teenage women, they have a considerable potential for further fertility postponement as well as for a modest decline in fertility quantum if these unwanted births were to be eliminated in the future.

The 'low-fertility' countries of Central-Western Europe and Southern Europe

Italy and Spain, whose fertility patterns have become remarkably similar, and the three German-speaking countries of Central-Western Europe (Austria, Germany, and Switzerland) share low levels of fertility quantum (with the adjusted TFR close to 1.5-1.6) and very late first birth timing (except for Austria). Italy and Spain have the latest first birth pattern in Europe, moderate levels of childlessness and a declining progression rate to second child. Austria, Germany, and Switzerland have achieved low first birth quantum and corresponding high levels of childlessness. Greece has similarly low levels of fertility quantum, but together with Austria and Portugal it also records earlier timing of first birth and still has considerable scope for additional fertility delays.

The post-communist countries of Central Europe and the Baltic countries

Despite their very low levels of total fertility rates, these countries still display 'moderate' levels of fertility quantum, with the adjusted TFR about 1.7 (lower in Latvia). Childlessness has been increasing from very low (5-10%) to moderate levels (about 15%, probably higher in Poland), while the progression rates to second birth have remained relatively higher. These

countries experience rapid fertility postponement and very strong tempo effects and, with the exception of Slovenia, still retain considerable potential for a continuing strong increase in childbearing age, provided that they will converge closer to the levels in other European regions.

South-eastern Europe and the European countries of the former Soviet Union

South-eastern Europe and the four European countries of the former Soviet Union (Belarus, Moldova, Russia, and Ukraine) have recorded a relatively slow to moderate first birth postponement and a pronounced decline in fertility quantum, marked especially by the reduced progression rate to second child and only a gradual increase of childlessness. Age at first birth still remains low when compared with other parts of Europe and, consequently, this region might experience a long period of fertility postponement and pronounced tempo-effects. Especially in the post-Soviet countries, accelerated fertility postponement might bring further decline in birth rates and sustain lowest-low fertility levels for a long period of time. However, given the continuing early-childbearing norms, it remains unclear whether fertility postponement will be as pronounced there as in the other post-communist societies. In addition, women in these countries still often rely on abortion and traditional contraceptive methods to prevent unwanted births. An expansion in the use of the contraceptive pill may eliminate part of the unplanned pregnancies and further reduce fertility quantum, and, consequently, also period birth rates.

9.2.5 Considering other determinants of fertility change

The previous sections have summarised the findings related to the influences of tempo effects across Europe. Naturally, separating tempo and quantum components of fertility change does not suffice for a well-grounded fertility projection. Substantive explanations of both tempo and quantum changes should be provided and the effects of possible future developments in contraceptive practice, employment, education, social policies, or population composition (e.g. due to migration), might be considered. A number of relevant factors were debated in the individual chapters, providing important insights for fertility projections. It would be beyond the scope of this study to specify how the future fertility in individual countries might be influenced by these factors. Suffice to say that the scenarios of period fertility, constructed on the basis of the above-specified findings, may also accommodate possible influences of various changes. The simplest model can capture country-specific values of selected factors which would presumably increase or decrease fertility rates as given in the baseline model; such a framework has been sketched out by Morgan for Italy and the United States (2003: 598, Table 4) on the basis of Bongaarts' (2001, 2002) contributions.

9.3 DISCUSSION: CONSEQUENCES OF LATE CHILDBEARING PATTERNS

What are **the individual and social implications** of late parenthood? At the individual level, fertility postponement, in particular above age 35, is linked with a number of negative biological and health consequences, namely lower fecundity, longer waiting time to conception, higher frequency of miscarriages and stillbirths, more pregnancy complications and foetus abnormalities, higher number of multiple pregnancies and premature births (Stein and Susser 2000, Beets et al. 2001).² At the societal level, the late childbearing pattern implies an increased need for intensive health care during pregnancy, a booming demand for costly reproductive technologies, and potentially worsening indicators related to infant health and mortality. Delayed parenthood also contributes to the changing character of intergenerational support and redefinition of family obligations. As suggested in Chapter 2 (Section 2.4), late parenthood may be compatible with increased labour participation among potential grandmothers, and with later retirement and improved health status among grandparents in general, who may become ‘available’ for providing childcare at higher ages. In Menken’s (1985: 478) view “daughters can postpone childbearing and still expect that their children will grow up with lively and active grandparents.” At the same time, however, parents having children at relatively late ages face an increasing risk of a double burden of child-rearing and care for their elderly parents.

The process of fertility postponement has a number of ramifications related to fertility level which have been repeatedly discussed in this study. Firstly, it exerts downward distortion on the period numbers of births and fertility rates, contributing in many countries to low and very low levels of period total fertility, thus generating irregularities in the age structure of population. A considerable portion of the baby booms and busts in 20th century Europe can be attributed to shifts in fertility timing, rather than to changes in completed cohort fertility. Secondly, later timing of first birth is associated with the lower quantum of cohort fertility. According to various researchers (e.g. Rindfuss, Morgan, and Swicegood 1988; Morgan and Rindfuss 1999; Kohler, Billari, and Ortega 2002) this association may be attributed to increased infertility among older women, to the incompatibility of labour participation with childcare, to the selectivity of women who have children early in life (i.e. more fecund and more family-oriented women), and to the fact that childless women may simply become accommodated to their ‘child-free’ status and continue ‘putting off’ childbearing indefinitely. However, some studies suggest that the effects of fertility postponement are not necessarily detrimental to completed cohort fertility. Women with higher education in particular often display strong increase in their fertility after age 30 (see Chapter 2, Section 2.2.1 and the discussion in Chapter 3, Section 3.6), although not fully

² Mirowsky’s (2000) findings on the positive association of late parenthood with the health status of mothers and fathers, discussed in Chapter 2 (Section 2.4), suggest that delaying parenthood may have positive health consequences for parents.

‘catching-up’ to the level of less-educated women who start childbearing at an earlier age (e.g. Kravdal 2001; Rendall and Smallwood 2003). Moreover, the negative association between the timing of first birth and completed fertility may decline over time (Morgan and Rindfuss 1999; Kohler, Billari, and Ortega 2002). In the case of France, the analysis of Toulemon and Mazuy (2001: 642, Figure Annex 2) has revealed that the parity-progression ratios to higher-order births have remained stable despite the ongoing postponement of first births. A rather curious effect of the increasing age at motherhood is that a longer generation cycle implies a lower rate of population decline in societies with below-replacement fertility. The simulations of Goldstein, Lutz, and Scherbov (2003) have shown, however, that the beneficial effect of fertility postponement for reducing the rate of population decline is rather marginal in comparison with the two strong countervailing effects: tempo distortions during fertility postponement and reduced completed fertility due to the ‘postponement-quantum interaction’.

Lutz, O’Neill, and Scherbov (2003) and Lutz and Skirbekk (2004) have suggested that **policies targeting the timing of childbearing** may become more acceptable than policies aiming to influence the quantum of fertility. In their view, such policies would address the main reasons for continuing fertility delays, including work-family compatibility, and may potentially “revamp the conventional sequence of life course transitions” (Lutz, O’Neill, and Scherbov 2003: 1992), for instance, by encouraging student couples to have children. However, in the light of the multiple social, economic, and cultural forces jointly supporting fertility postponement, it appears that ‘tempo policies’ are hardly capable of altering the trend towards the late-childbearing pattern. While lowering the age at finishing education or allowing an easier combination of employment and childcare may potentially contribute to an earlier entry into parenthood, other factors are likely to facilitate additional postponement of childbearing. In other words, most of the non-coercive factors³ influencing the timing of parenthood appear to be even more beyond the reach of government policies than the factors potentially influencing fertility level are. With some exaggeration, it could be said that no policy within the reach of democratically elected governments operating with tight budgets can simultaneously reduce unemployment, enhance job stability for men and flexible work opportunities for women, shorten the duration of education, put parenthood at the top of young adults’ priorities, cement their unstable intimate bonds, reduce their consumer aspirations, and provide them with affordable housing. Potentially, a gradual stabilisation of the mean age at first birth appears to constitute a more realistic and feasible policy target.

³ I do not consider here the possible effects of coercive policies, such as reducing access to contraception and abortion, discouraging women from labour participation, limiting housing availability to people with children only, or considerably restricting access to post-secondary education, none of which belongs in the portfolio of the possible options of democratically elected governments. The evidence from Central and Eastern Europe before 1990 indicates that such factors are often effective in encouraging early childbearing.

9.4 SUGGESTIONS FOR PROGRESS AND FURTHER RESEARCH

This study has discussed a broad array of issues related to contemporary European fertility patterns. Since many topics were not addressed in detail, much of the existing evidence on fertility patterns and trends is relatively fragmented, and many areas were left unexplored, this section outlines five areas which deserve further attention.

Availability of data on order-specific fertility

Even relatively simple cross-country comparisons are hindered by the low availability of detailed parity-specific data on period and cohort fertility. The period time series are short in many cases and some countries, namely Belgium, Germany, Switzerland, and the United Kingdom, still continue collecting information on birth order within marriage only. These data are useless in the context of widespread extra-marital fertility. Detailed indicators of cohort fertility, which enable reconstruction of exposure-based indicators of period fertility, are even scarcer and frequently should be assembled from different, often inconsistent, sources. Given the importance of parity-specific data for analysing decision-making on parenthood and subsequent childbearing in low-fertility societies, their wider availability is warranted for the future fertility research. For instance, the continuing differences in fertility by birth order between East Germany and West Germany after the unification in 1990, identified by Kreyenfeld (2001), could be examined in detail if Germany were collecting data on biological birth order of newborn children. Furthermore, detailed order-specific data on birth interval distributions, which are collected but not published by many statistical offices, may provide a very useful additional dimension to study fertility differences across Europe. The expansion of data availability may proceed in two ways. First, statistical offices may utilise the existing sources, such as population registers and vital statistics, to produce standardised tabulations of period and cohort fertility data by birth order and age of mother. Statistics Netherlands is one of the few statistical bodies that publishes long time series of both period and cohort fertility data (see CBS 2002, 2003a, and 2003b). Second, time series of fertility data may be estimated on the bases of census data and large-scale surveys; such estimates have recently been produced for England and Wales (Smallwood 2002b), France (Toulemon and Mazuy 2001), and West Germany (Kreyenfeld 2002).

Determinants of fertility postponement during the life course

The large number of factors, repeatedly identified as contributing to fertility postponement, makes it particularly difficult to disentangle their influence on the overall trend towards increasing age at parenthood. Innovative studies analysing fertility decision-making during the life course may shed light on some unresolved issues. One of the most pertinent questions is how the different types of uncertainty influence fertility decisions of men and women. Particularly work uncertainty, as captured by the employment situation of an individual or

general age-specific trends in unemployment rates, appears to have unequal and often contrasting impact on men and women in different countries, among different social strata, and, possibly, also for women at different parity status (see Chapter 2, Section 2.2.3 and Chapter 8, Section 8.3.3). Similarly, the effects of delayed partnership formation as well as the increasing prevalence of cohabitation and the instability of partnerships on postponing childbearing are not well understood. How does the extended period of a search for the ‘most suitable partner’ affect the timing of first birth among women? Do specific partnership pathways impinge upon the timing of parenthood, or do they merely mirror individual preferences for certain living arrangements, which do not contribute independently to any additional postponement of first birth? These are issues particularly difficult to address: their analysis implies controlling not only for the usual factors of education, employment status, and family background, but also accounting for cultural factors such as religiosity and value orientation in young adulthood. Especially the influence of values on fertility timing remains largely unexplored. Moreover, life history surveys have yet to find a way how to record and categorise increasingly diverse and non-standard partnership histories, which are vastly differentiated by duration and the level of commitment. Finally, an integrative perspective on the timing of first births should address interaction between various factors fuelling fertility postponement.

The research on the patterns and determinants of fertility ‘recuperation’

There are surprisingly few studies addressing fertility ‘recuperation’ among women in a later stage of reproductive span (Lesthaeghe 2001). This issue should rank high on the research agenda, because the future numbers of births as well as the future fertility rates in European countries depend strongly on the extent to which women postponing childbearing will ultimately realise their ‘postponed’ fertility later in life. The aggregate data show that there are sizeable regional differences in the intensity of fertility recuperation among ‘older’ mothers. The pronounced ‘recuperation’ of first birth probabilities among women past age 30 in the Netherlands and in Northern Europe (see Chapter 3, Section 3.4.4) as well as intensive ‘catching up’ among highly educated women after age 30, recorded in a number of studies, indicate that there exists a considerable scope for the eventual ‘recovery’ in period fertility rates. Many different topics can be investigated within the research on fertility ‘recuperation’: the cross-country differences in period and cohort ‘catching-up’, the size of the ‘postponement-quantum interaction’ (i.e. the decline in fertility quantum associated with additional fertility postponement), the trends of childbearing at very high reproductive ages and related health complications, and the prevalence of infertility and infertility treatment.

Research on men and fertility behaviour

The traditionally strong focus of fertility analysis on women usually leaves fertility behaviour and attitudes of men out of the picture. Given that men remain more often single and

childless, their family role appears to have eroded substantially (Goldscheider and Kaufman 1996), and children increasingly grow up without their biological father in single-parent families and stepfamilies (e.g. Hueveline, Timberlike, and Furstenberg 2003), better understanding of fertility decisions among men would in turn contribute to our understanding of current fertility trends. Are men really less motivated to form a family? How to explain their higher heterogeneity in terms of realised family size? Do they constitute a 'breaking force,' preferring to have children later than their partners? Fertility behaviour and attitudes among men possibly explain a portion of the increase in the mean age at first birth among women. Both aggregate-level data and survey data should provide considerably more information on men. Macro-level data could give evidence on living arrangements among unmarried mothers, about their partners, and about paternity recognitions for extra-marital children. Various surveys should take men more often into account and thus provide insights on men's fertility attitudes and behaviour, their partnership histories before childbearing, partners' negotiations concerning childbearing decisions, and on their fertility in the new partnerships following separation or divorce (step-family fertility).

Explaining fertility changes in Central and Eastern Europe

Compared to other European regions, there are still relatively few detailed and well-defined studies on fertility in Central and Eastern Europe. Considering the intensity of fertility changes in this region after 1989, such studies might contribute to theoretical debates on fertility and family changes in industrialised world and potentially provide challenging evidence to the established concepts on fertility change. Do many countries in this region follow the 'second demographic transition', as I have suggested with my colleagues (Sobotka, Zeman, and Kantorová 2003) in the case of the Czech Republic? What was the impact of economic transformation and the related uncertainty on living arrangements, partnership behaviour, and fertility? How much do the new opportunities in education, leisure, and career interfere with the family life? Comparative studies on Central and Eastern Europe are immensely interesting, given the current vast regional differences in terms of living standards, social composition of population (large proportion of farmers and agricultural workers in some societies), the character of economic transformation of the 1990s (relatively successful societies vs. societies facing severe economic and social crises), ethnic differences (particular ethnic minorities, especially the Roma people and some predominantly Muslim minorities), religious differences (secularised vs. more religious societies, traditionally Catholic countries vs. Christian Orthodox and Protestant societies), and other long-standing cultural differences. Finally, the study of fertility changes in Central and Eastern Europe is important in the light of recent population decline recorded there. In many countries, the precipitous decline in fertility rates was the main factor contributing to the declining population size, and the extent of the future fertility recovery—or the possible effects of government policies aiming to influence fertility—will determine the severity of population decline in the future.

9.5 CONCLUDING REMARKS

The shift towards the late transition to parenthood appears to be the most prominent feature of contemporary fertility trends in advanced societies. Current universality of fertility delay indicates that there is little chance of a trend reversal—a move towards earlier timing of parenthood. It is difficult to conceive such a shift without radical social change; there is not a single country in Europe which would experience lasting fertility ‘rejuvenation’ since the early 1970s. Rather, a gradual stabilisation of first birth timing at relatively late ages constitutes the most likely outlook for most countries with a long record of postponed childbearing. The fact that postponement of fertility is under way in such diverse societies as Belarus, Spain, and Japan, poses a challenge for plausible explanations, and supports the view that this process is driven by multiple causes.

Men and women may increasingly become ignorant of the contingencies of biological age, and many may not be able to have children once they would like to. In other words, late timing of parenthood is here to stay, and we are likely to hear more and more news about old and very old first-time mothers, such as the extreme cases pointed out at the start of Chapter 2.

