

Adolescent Transitions to Adulthood around the World

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Abstract

Adolescence is a period of key transitions in individuals' lives. During the teenage years, there is rapid physical, social, psychological and economic development as well as learning and skills building, along with risk and vulnerability. Social, economic and biological transitions set the stage for adult life as they shape adolescents' entire future. The first goal of this paper is to examine the levels and trends of three important transitions to adulthood for all countries in the world: childbearing, marriage and sexual debut. The second goal of this paper is to provide a categorization of adolescent fertility in relation to total fertility. Data comes from several censuses and household surveys. Results show that although not the norm, adolescent birth rates have increased from the 1980s to the mid-2000s in several countries in Latin America and Africa, and in a few Asian countries. I also document a mismatch between the relative levels of total fertility and adolescent fertility in a non-trivial number of countries.

Although adolescent marriage (married by age 20) is prevalent in most DHS countries examined, more than half of them showed a decrease of 40% or more in the prevalence of child marriage (married by age 15). This paper's results also indicate an overall pattern of moderate rising age at sexual initiation in developing countries. Although not necessarily causal, these early events can have staggering consequences for adolescents, for the most part truncating their schooling and limiting their paths into successfully transitioning to adulthood. Although my results indicate that many advances have been achieved across cohorts, there is still the need for improvements in offering adolescents with conditions for delaying childbearing and marriage in several countries around the world.

Introduction

Adolescence is a period of key transitions in individuals' lives. During the teenage years, there is rapid physical, social, psychological and economic development as well as learning and skills building, along with risk and vulnerability (Lloyd 2005; Dixon-Mueller 2007). It is also during this period that adolescents transition from a state of legal dependence from parents to a situation of civil and individual responsibilities and rights. In most countries, by age 18 adolescents acquire the right to vote and drive, and the right to marry without parents' legal consent. These social, economic, biological and demographic transitions set the stage for adult life and are likely to shape individuals' entire future. In fact, the well-being and quality of adolescents' future lives depend largely on how successful they are in taking advantage of opportunities and avoiding potential problematic outcomes during adolescence (Bongaarts and Cohen 1998; Dixon-Mueller 2007; Lloyd 2005; Singh 1998).

These definite years of rapid growth and change called adolescence have not always been defined the same way historically. Although the developmental stages we associate with the years during and after puberty appear to be universal, the events associated with adolescence today, such as school, boy-girl friendships and premarital sexual relations have not always been part of this period of life. Some argue that adolescence was created by postponing female marriage until well past puberty, and especially by keeping girls in school before they marry (Caldwell et al. 1998; Zabin and Kiragy 1998). Indeed, the period defined by unmarried sexual activity has been increasing as a consequence of marriage postponement and decreasing ages of menarche. External social and economic influences are also strong factors shaping the current way of life of adolescents (Caldwell et al. 1998; Lloyd 2005). Globalization brings about new ideas and lifestyles as well as new challenges that can conflict with traditional norms and values. How adolescence is defined has also to do to a large extent with cultural factors, as the interrelations between adolescence, sexuality, reproduction and marriage are complex and not the same everywhere and over time (Caldwell et al. 1998).

Despite historical and cultural differences in the way adolescence has been defined, it is clear that this is a stage of life that is gaining in significance as the interval between childhood and the assumption of adult roles is lengthening (Lloyd 2005). Most studies on adolescent fertility have

focused on ages 15 to 19, mainly due to data limitations¹. At the same time, results from a few studies looking at younger ages show that several of the transitions that occur during adolescence, including sexual initiation and the consequent exposure to pregnancy, are happening at high rates for adolescents younger than age 15 (Dixon-Mueller 2007). The importance of considering ages younger than 15 when examining teenage fertility also comes from the different circumstances under which adolescent childbearing happens for younger versus older teenagers, and its consequences for both mothers and offspring.

The structure of this paper is as follows. Following this introduction, we examine the current levels and recent trends in the adolescent birth rates for the period from 1980 to 2005. Next we examine three proximate determinants of adolescent fertility: marriage, timing of first sexual intercourse and contraceptive use. We provide the current levels and trends of these three factors, highlighting their interconnections with adolescent fertility. In the final section of the paper we provide a typology of teenage fertility relating its levels with the levels of total fertility rate, teenage marriage, sexual debut and contraceptive use for each country in the world where there is data available.

The Importance of Adolescent Childbearing

The relevance of adolescent fertility is exacerbated by the unprecedented large sizes of cohorts of young people in the developing world (Lam and Marteleto 2008). The size of the adolescent and young populations will soon reach a historical peak in several developing countries, a peak that will likely generate the largest number of young people these countries will ever see (Lam 2006; Lam and Marteleto 2005). Even though the growth rate of the adolescent population is significantly lower today than it was 30 years ago in almost all developing countries, the large sizes of the income youth cohorts are likely to result in increases in the absolute numbers of teenage births, if adolescent birth rates remain constant. For many countries in Asia and Latin America, the largest cohorts ever born will soon become adults and some of the biggest challenges in providing services to these cohorts will be behind them. In contrast, most African

¹ McDevitt and colleagues have focused on 15-19 in a US census Bureau Report on adolescence fertility and contraceptive use in developing countries (McDevitt et al 1996); Singh 1998 used estimates for age groups 15-19 and 20-24 to look at adolescent childbearing in the developing world; Past United Nations Reports on this topic have focused on the ages ranging from 13 to 19 (1988; 1989). A recent IUSSP report has focused on adolescents transitions to adulthood in developing countries.

countries face significant ongoing challenges in the coming decades, as their already large adolescent and youth populations continue to grow (Lloyd 2005; Lam 2006). This so-called “youth bulge” is one important reason for the recent attention given to the demographic, economic and social situation of youth around the world (National Academy of Sciences 2005).

Another important motivation for examining adolescent fertility is the pervasiveness of its consequences. The massive consequences teenage childbearing is likely to produce go from the future lives of young parents and their offspring to the societal level. There are essentially two types of ramifications to adolescent childbearing at the individual level: those involving health-related risks to mothers and their offspring, and those related to adolescent parents’ capacity to incur well in subsequent transitions to adulthood, such as successful educational and work trajectories, and full citizenship.

Adolescent girls and their children are more likely than their older counterparts to suffer pregnancy-related complications such as low birth weight, infant mortality and prematurity (Bledsoe and Cohen 1989). At the same time that the negative health consequences of adolescent pregnancy and childbearing have been well documented, there is also evidence that health effects that appear to be related to birth at young ages may not be caused solely by age, but by intertwining factors such as lack of access and use of professional health care and malnutrition (Zabin and Kiragu 1998), which reinforces the interconnections between the health consequences of teenage fertility and the social roots in which they are embedded.

There is a vast literature on adolescent parents’ ability to incur well in subsequent transitions to adulthood, such as educational trajectories and economic independence². Childbearing often interrupts adolescents’ educational career, if not by permanently dropping out of school, at least by slowing down educational progress (Marteleto et al 2008). However, some works have indicated the importance of recognizing that, for several adolescents in many countries, adolescents’ educational trajectory was already truncated when pregnancy and birth occurred (Geronimos and Korenman 1992; Marteleto et al 2008; Grant and Hallman 2008). Once again,

² A very good review of this literature is provided in the National Academy of Sciences’ report, *Growing up Global* (Lloyd, 2005) as well as in the volume *The Changing Transitions to Adulthood in Developing Countries* (Lloyd et al. 2006).

the interplay of poverty and lack of opportunity needs to be considered when examining adolescent fertility.

The same level of complexity related to the consequences of teenage fertility is also characteristic of its determinants. The determinants of teenage childbearing are interrelated and encompass several dimensions of adolescents' lives, from the traditional proximate determinants of fertility to socio-economic conditions and cultural factors. The relationship between childbearing and timing of sexual initiation, contraceptive use and marriage is particularly relevant as the circumstances under which the risk of teenage fertility occurs are likely to be very different depending on these factors. Indeed, although the levels of adolescent fertility are similar in some regions and countries of the world, trends in marriage, contraceptive use and timing of sexual initiation can be very different as we will show in the next sections of this paper. It can be therefore limiting to discuss adolescent childbearing without considering its associations with these three determinants.

Another important aspect in the study of adolescent fertility is that studies in this area have historically focused on females. The study of adolescent fertility, its trends, determinants and consequences has been widespread for females mainly because it is a more common event for girls in this age range than it is for boys, particularly due to the patterns of age difference between partners with females being younger. Issues of underreporting births are also more common among males than females. As a consequence, most data on adolescent childbearing has been available only for females. Only recently surveys have gathered data on males. Despite the scarcity of data and relative infrequency of adolescence fatherhood in relation to adolescence motherhood, parenthood in adolescence has very different meanings and consequences for boys versus girls. Recent studies have been focusing on young fathers and have found important differences (Biddlecom et al. 2008; Marteleto et al. 2008). Since there are no data available for male trends in all countries in the world, we focus our analyses on females.

Adolescent Birth Rates

A first step in our analysis of recent adolescent fertility is to examine its current levels and recent trends for countries with two or more available data points since 1980. Table 1 shows the adolescent birth rates by country where there are available data. Data classified as "earliest year" correspond to information from the earliest data available for the country during the period

corresponding from 1980 to 1994. Data referred to as “latest year” pertain to data from 2005 or latest available data for that country from 1995 to 2005. Although this is a general rule that allows for the analysis of trends in the adolescent birth rates, it is important to consider that the interval between the available data points is shorter in some countries and therefore long-term changes may go unnoticed. The analysis is based on vital registration records, nationally representative fertility survey data and, in a few cases, on census data from the 1980s to the mid-2000s in the more than 200 countries where this information is available.

Table 1 shows that in Africa, the proportion of adolescent mothers was generally high in the 1980s and is still considerably high in most countries of the region, ranging from 7 (Libyan Arab Jamahiriya) to 219 (Niger) in the 1980s, and from 6 (Algeria) to 201 (Democratic Republic of Congo) in the 2000s. The regional adolescent fertility rate for Africa is 116 births per 1,000 women ages 15-19 in the mid 2000s.

[Table 1 about here]

It is important to highlight that there are important exceptions to the general pattern of high adolescent fertility rates in Africa. The adolescent birth rates are lower than 60 births per 1,000 women in Burundi, Comoros, Djibouti, Mauritius, Réunion, Rwanda, Somalia and Botswana. Another important exception is Northern Africa, where the adolescent birth rate in the 2000s is never higher than 50 in any of the countries of the region. Despite the already low levels, we find significant declines in the adolescent birth rates in all Northern African countries for which there are available trend data. Tunisia shows a sharp decline, from 28 births per 1,000 women ages 15 to 19 in 1986 to 8 in 1999. In Algeria the adolescent birth rates also declined remarkably, falling from 35 in 1986 to 6 in 1998. Middle African countries do not reveal the same substantial declines in teenage birth rates as Northern African countries, with the exception of Cameroon.

Declines in the adolescent birth rates are evident in several Eastern African countries with the exception of Madagascar, Malawi, Mozambique, Tanzania, Zambia and Zimbabwe where we find practically no change over the period we examined. Eritrea and Kenya show declines above 70% while Burundi shows a remarkable decline with the adolescent fertility rate going from 93 to 30 births per 1,000 adolescent from 1980 to 2002.

All Southern Africa show a pattern of decreasing adolescent birth rates during the period examined, with the exception of Lesotho, where the adolescent birth rate increased by 81%. South Africa's adolescent birth rate was cut down in half, having declined from 124 in 1988 to 65 in 2001. In Botswana the adolescent fertility rate fell at remarkable levels, from 125 in 1986 to 51 births per 1,000 women ages 15-19 in 2001.

There are mixed trends in the adolescent birth rates in Western African countries, but most countries show a pattern of decline. In Benin, Burkina Faso, Côte d'Ivoire, Ghana, Niger, Nigeria, Senegal, Sierra Leone and Togo we find declines in the adolescent fertility rates. In Côte d'Ivoire, Ghana, Senegal and Togo there were significant declines of more than 20% in the adolescent birth rates from the earliest to the latest periods. Sierra Leone shows a remarkable decline, with the teenage fertility rates falling from 202 in 1984 to 118 in 2003. The rates remained stable in Guinea, Mali and Mauritania while in Cape Verde and Gambia they increased during the period examined.

The adolescent birth rates of Eastern Asian countries were already extremely low in the 1980s and early 1990s, but all of them experienced further declines throughout the period examined, with the exception of Japan where rates were already extremely low. China shows the sharpest decline in the region, where the adolescent birth rate went from 19 in 1986 to 3 in 2002.

Overall, the other Asian sub-regions have higher adolescent fertility rates than Eastern Asia. Most countries in South-central Asia show a decline in the adolescent birth rates, with the exceptions of Nepal and Uzbekistan where there was virtually no change over time, and Tajikistan and Turkmenistan where the birth rates have increased. The sharpest declines within this sub-region are found in Iran and Pakistan. We also find declines in the adolescent birth rates in most of South-eastern Asian countries for which there are available trend data. Thailand, Lao People's Democratic Republic and the Philippines are the exceptions. In Thailand, there was a sharp increase from 43 in 1986 to 70 in 1995. In the Philippines and Lao People's Democratic Republics the rates remained practically unchanged. The most substantial declines are found in Cambodia and Malaysia. In Cambodia, the adolescent birth rate went from 174 in 1989 to 52 in 2003, whereas in Malaysia it went down by half—from 24 in 1986 to 12 in 2000. The level is much lower in Singapore and went down further—from 9 in 1986 to 7 in 2004.

In most of the Western Asian countries, teenage fertility was already relatively low by the 1980s and the most recent data show even lower levels. In all countries teenage fertility was already below 60 births per 1,000 women ages 15 to 19 in the 1980s, with the exception of the Occupied Palestine Territory, Oman, Qatar, the Syrian Arab Republic, Turkey and Yemen. Despite these low levels in the 1980s, adolescent birth rates have declined further in most countries in the region. On the other hand, there has been a sharp increase in the adolescent fertility rate in Azerbaijan—a change from 21 in 1986 to 31 in 2004.

The overall adolescent fertility rate for Europe is 20 births per 1,000 women in the 2000s, the lowest level of all continents. The adolescent fertility rate is 28 births per 1,000 female adolescents in Eastern Europe, a level that is above the overall European rate. Despite showing the highest current adolescent fertility rate for the region, considerable declines have taken place in Eastern Europe from the 1980s to the 2000s. The sharpest declines happened in the Czech Republic, followed by Poland, Slovakia, Hungary, Bulgaria, Romaine and Ukraine, all in the magnitude of 50% or more. With 40 births per 1,000 women ages 15 to 19, Bulgaria presents the highest teenage fertility rate in the region in the 2000s.

Northern Europe has shown very low teenage fertility levels, with a regional rate of 21 in the 2000s. The adolescent birth rate ranged from 6 births in Denmark to 27 births per 1,000 women 15-19 in the United Kingdom by the mid-2000s. All countries but Ireland and the Channel Islands showed declines from the 1980s to the 2000s. The Irish adolescent fertility has increased from 16 to 19. Sweden, Norway and Denmark display single digit birth rates, a similar level to some Southern European countries such as Italy and Slovenia. However, the overall adolescent birth rate is much lower in Southern Europe—12 births per 1,000 adolescent females—than in Northern Europe—21 births per 1,000 adolescent females. Slovenia shows quite a remarkable decline throughout the period examined—from 37 in 1986 to 6 in 2003. The only countries in Southern Europe to show a raise in adolescent fertility are Albania and Malta.

Western Europe shows the lowest adolescent birth rate of the entire continent in the 2000s—9 births per 1,000 women ages 15-19. All countries in Western Europe showed adolescent birth rates of 24 or lower by mid 1980s and by mid 2000s the rates reached levels below 14 in all countries. Despite showing the highest adolescent fertility level in the region, Belgium and Austria present sharp declines during the period examined.

The overall adolescent birth rate for Latin America and the Caribbean in the latest period is 80 births per 1,000 adolescent females. The highest rate in the region is found in South America (81) followed by Central America (79) and the Caribbean (69). There have been consistent reductions in the fertility levels of adolescents in several Caribbean countries, at varying magnitudes. The sharpest declines—with magnitudes of 30% or higher—happened in Cuba, Jamaica, Saint Lucia and Trinidad and Tobago. In Barbados and Saint Vincent and the Grenadines the rates remained nearly constant during the period examined. We see increases in some countries, demonstrating that there is no single consistent pattern across the Caribbean. In the Dominican Republic the birth rate went from 91 in 1989 to 118 in 2001, the highest in the region.

Central American countries had consistently higher adolescent fertility levels than Caribbean countries in the 1980s. In the earliest period, the rates ranged from 93 in Panama to 135 in Honduras. All Central-American countries showed either stability or decline during the period examined. In Mexico for example, the adolescent fertility rate remained unchanged from 1986 to 2000 at 94 births per 1,000 women ages 15 to 19. The adolescent birth rate has also been stable in Guatemala while Belize showed the sharpest decline in the region—from 129 in 1986 to 90 in 2002.

In South America, there have been increases in teenage fertility in Brazil, Colombia and Ecuador and virtually no change in Bolivia, French Guiana and Uruguay. In Brazil, the rise was from 58 to 71 from 1986 to 2000, whereas in Colombia the rise was from 70 to 92 from 1988 to 2003, and in Ecuador the birth rate went from 55 in 1987 to 100 in 2004. The highest levels of adolescent fertility in South America in the latest period are found in Bolivia, Colombia, Ecuador and the French Guiana, all above 90 births per 1,000 women ages 15 to 19.

The overall adolescent fertility rate in Northern America is 41 births per 1,000 females ages 15-19 in the 2000s. Canada presents the lowest fertility rate in the region in both periods—23 in 1987 and 14 in 2003. The United States shows a decline in the adolescent birth rate—from 51 in 1986 to 43 in 2002.

The adolescent birth rate in Oceania is 33 births per 1,000 female adolescents for the latest period examined. In Australia and New Zealand together the rate is consistently lower (19) than in the overall region. In Australia, the rate went from 21 in 1986 to 16 in 2003, and in New Zealand it went from 30 in 1986 to 27 in 2004. All countries show a decline in the adolescent

fertility rates, with the exception of Vanuatu where the rate went from 78 in 1989 to 92 in 1999. All countries in Micronesia show declines throughout the period examined, with the exception of Nauru where the teenage fertility rate has increased from 78 in 1994 to 93 in 1999. The overall adolescent fertility rate in Polynesia is 36 births per 1,000 females ages 15-19. All countries show declines from the 1980s to the 2000s, with the exception of Samoa and American Samoa and Tuvalu.

Figures 1 and 2 show the levels of adolescent birth rates described above using world maps. Figure 3 shows a map of the annual rate of change of the adolescent birth rates between the earlier and the later periods. The advantage of using maps to display trends in rates is that they provide a visual sense of the overall picture of continuity or change of adolescent fertility over time and across countries and regions. Figure 1 includes data from the 1980s, while Figure 2 depicts the latest information available, ranging from the mid 1990s to the mid-2000s. Figure 3 shows the annual change in adolescent birth rates from the 1980s to the 2000s for all countries where data are available. The intervals for grouping the countries were defined as: annual decline of 3% to 9%; annual decline of 2% to 3%; annual decline of 1% to 2%; annual decline of 0 to 1%; and annual increase up to 14%.

Figure 1 demonstrates that all countries with very low adolescent birth rates in the 1980s were in Europe or Eastern Asia, with the exception of Libya and Singapore. In fact, in all European countries the adolescent birth rates were below 45 by the 1980s. Figure 2 shows that, by the mid-2000s, virtually all of Europe had fallen into the low adolescent fertility category.

[Figure 1 about here]

In addition to Europe, Northern Africa, Canada, Australia, some parts of South-east Asia have also shown adolescent birth rates lower than 45 already by the 1980s. The United States is one of the only countries in the developed world that fell into the mid-level range of 45 to 65 births per women in the earlier period examined. Brazil and Russia compose the group of large developing countries characterized by the mid-level range of 45 to 65 births per 1,000 women in the 1980s. However, whereas in Brazil adolescent fertility has remained stable from the 1980s to the 2000s, Russia and the United States show a pattern of decline.

Most of South and Central America exhibited high adolescent fertility rates by the 1980s, ranging from 55 to 135 births per women. One out of four South American countries and nearly one out of five Caribbean countries were in the very high adolescent birth rates category. Figures 1 and 2 make clear that, except for a few South American countries, the pattern of moderate to high adolescent fertility levels remained stable from the 1980s to the 2000s.

[Figure 2 about here]

The majority of the countries in Western, Eastern, Middle and Southern Africa exhibited very high adolescent fertility rates in the 1980s—95 births per 1,000 women ages 15-19 and above. In general, African countries showed the highest levels of adolescent fertility in the world both by the 1980s and by the 2000s. With a few exceptions, Figures 1 and 2 show a trend of stability throughout the period examined. Adolescent birth rates have fallen from the highest to a moderate high level in South Africa, Egypt, Sudan and Ghana. Indeed, in South Africa the adolescent birth rate declined dramatically, falling from 124 to 65 births per 1,000 female adolescents. However, it is important to note the context and particularities of these declines to fully understand their implications as, for example, in South Africa, differently from most African countries, adolescent fertility is synonym of unmarried fertility.

[Figure 3 about here]

The countries with higher declines in the adolescent birth rate were in Africa, Asia and Eastern Europe. The largest declines, in the magnitude of 5% or more, were found in Belgium, Cambodia, China, Grenada, Iraq, Pakistan, Tokelau and Wallis and Fortuna. The countries where the adolescent birth rate declined in a magnitude ranging from 2% and 3% are widespread in all continents, with the largest declines found in Armenia, Ghana, Iceland, Romania and Ukraine. The next category portrayed in Figure 3 groups countries that witnessed an annual decline in the adolescent birth rate that ranges from 1% to 2%. As with the last category, there are countries in all continents with declines ranging from 1% to 2%. Among those we see Bangladesh, India, Indonesia and Singapore in Asia; Angola, Kenya and Namibia in Africa; Australia; France, Portugal and Switzerland in Europe; Argentina and Peru in South America; and Costa Rica in Central America. We also find several countries where the adolescent birth rate remained unchanged or declined less than 1% throughout the period examined. Among those, the following countries experienced a decline of less than 0.5% in the

adolescent fertility rate: Chad, El Salvador, French Guiana, Georgia, Guatemala, Guinea, Guyana, Lao People's Democratic Republic, Madagascar, Mexico, Montenegro, Tuvalu and Uzbekistan. The final group of countries portrayed in Figure 3 experienced increases in the adolescent birth rates from the 1980s to the 2000s. In Barbados, Bolivia, Congo, Malawi, the Netherlands and the United Republic of Tanzania the increase was less than 0.05%. Increases ranging from 1% to 4% were found in Azerbaijan, Brazil, Cape Verde, Channel Islands, Colombia, the Dominican Republic, Ethiopia, Gambia, Guadeloupe, Ireland, Japan, Liechtenstein, Malta, Mozambique, Nauru, Turkmenistan and Vanuatu. The largest increases, ranging from 4% to 14%, were seen in Albania, the Democratic Republic of Congo, Ecuador, Lesotho, Libyan Arab Jamahiriya, Samoa, Tajikistan and Thailand.

Adolescents' Transitions to Adulthood

Timing of first sexual intercourse, contraceptive use and timing of entry into first union constitute three of the intermediate variables that affect fertility (Bongaarts 1978). These so-called proximate determinants of fertility are the direct pathways through which social, economic and demographic factors affect fertility outcomes, including adolescent fertility (Bongaarts 1978). The proportion married intends to reflect the proportion of adolescents who engage in sexual activity regularly. Contraceptive prevalence measures any deliberate practice undertaken with the intent to reduce the risk of conception, while the frequency of intercourse reflects the normal variations in the rate of intercourse. Since I am examining a very young group of individuals, I consider sexual debut, that is, whether adolescents have started sexual intercourse. In the following section I discuss the current levels and trends of these variables, including their interconnections with adolescent fertility.

***Marriage*³**

Despite the fact that marriage at some point in an individual's life course is by and large universal, there is a great deal of variation on the timing of marriage. It is this variation in what

³ It is important to note that the levels and trends for male marriage are usually different than those for female marriage. Almost everywhere males tend to marry later, showing smaller proportions of adolescent marriage than females. For this reason and also because not all countries in Table 3 have information available on males, we opted to examine female marriage only at this point.

point of one's life course marriage takes place that will have several important implications for subsequent outcomes, including fertility. Empirical evidence has shown that early entry into union is strongly associated with early childbearing (Mensch et al. 2005). A union exposes individuals to frequent sexual activity, therefore increasing the probability of pregnancy and childbearing. The timing of first union merits investigation also because the age when individuals marry has implications for the organization of family life and gender relations within society (Mensch et al. 2005). In addition, early marriage is likely to truncate adolescents' subsequent successful transitions to adulthood, particularly for girls. It has been found for example that early marriage and not necessarily early childbearing strongly limits girls' educational careers in francophone Africa (Lloyd and Mensch 2006).

The changes of the late century have profoundly altered marriage as a social institution and the timing of it. First, the transitions to marriage and parenthood are no longer a rigid sequence of events (Lloyd 2005). Second, marriage is being increasingly postponed, although it is still the norm in most societies. Third, other forms of marital union have been taking place. In several contexts, informal unions have been competing with formal marriage, particularly for young people. Although consensual unions have been historically an integral part of the union system in Latin America (Martin 2002), cohabitation has further diversified marital arrangements in other places where it was not a usual practice, and is an additional sign of the erosion of obligations and commitments associated with formal marriage. The prevalence of consensual unions has been documented to be remarkably high in most Latin American societies, with only a few exceptions (Martin 2002). In Europe, approximately a third of women ages 25-34 were either cohabiting or have cohabited (Kiernan 2002). In Sweden for example informal unions are very common as 74.1% of women born in the early 1960s have been in an informal union by age 25. Another important change that has taken place in teenagers' life cycles is that female adolescence has been lengthened by later ages at marriage and, in many settings, by earlier menarche (Caldwell et al. 1998). As a consequence of the postponement of marriage, premarital births have increased in absolute numbers.

In this section, I examine two indicators of adolescent marriage, with a focus on both current levels and cohort trends. First, I look at the proportion of adolescent females married⁴ by ages

⁴ The advantage of the proportion married by ages 15, 18 and 20 over the singulate mean age at marriage (SMAM) is that the later assumes stability, i.e., it implies no change over time in the age-specific incidence of first marriage.

15, 18 and 20 for two cohorts and current levels, where data are available. I define the older cohort as females born in the 1950s and early 1960s and experiencing adolescence in the mid-1960s and 1970s. Females in the younger cohort were born in the 1970s and early 1980s and experienced adolescent in the mid-1980s and 1990s. Where data are available I provide statistics for current cohort, that is, those experiencing adolescence in the 2000s. Second, I examine the latest information available on the proportion of females ever married by ages 15-19 and 20-24. Although these figures are based on current rates, they cover a whole range of countries where the information on proportions married by ages 15, 18 and 20 do not exist. This will provide a solid basis for comparison on the levels of adolescent marriage in one point in time.

The data used come from the United Nations Population Division database, the Demographic and Health Surveys, Centers for Disease Control and Prevention Surveys and the Family and Fertility Surveys. The advantage of the first dataset is that it is available for a larger number of countries⁵, while the advantage of the DHS, CDC and FFS surveys is more detailed information beyond current marital status, including proportion married during adolescence by cohort.

Proportion of Females Married by Ages 15, 18 and 20

As such, SMAM can therefore be misleading when an increasing fraction of young people delay marriage and ultimately remain unmarried (Mensch et al. 2005). In addition, a substantial decline in the proportion of people marrying early may have a small effect on the mean age at marriage for the population, but it would for sure be reflected on the measure on proportion of men and women married by age 20.

⁵ A note of caution is appropriate when comparing marriage indicators across countries because of the existing differences in the definition of marriage in the censuses and surveys. In the DHS, the concept “married” includes both formal and informal unions as respondents are asked if they are currently married or are living with a man (DHS 2003). In the FFS, information on marriage and cohabitation are recorded separately, therefore allowing for a more clear distinction between these two types of union (Fertility and Family Surveys). In most censuses, marriage is considered a recognized and accepted union, therefore generally including only formal marriages (Lloyd 2005). There might still be differences on how each census records marriage depending on what is considered a recognized and accepted union in each society. For example, in many Latin American countries, there is a high prevalence of consensual unions, part of the historical traditions and generally accepted forms of union (Martin 2002).

Table 2 shows the proportion of females married by ages 15, 18 and 20 for cohorts of women born in the 1950s and experiencing adolescence in the mid 1960s and 1970s and for women born in the 1970s and experiencing adolescence in the mid 1980s and 1990s. Where data are available I also provide the proportion of females married by each age for the current cohort, that is, for those who were 15-19 or 20-24 years of age in the 2000s. This table provides a complete picture of the recent levels and cohort trends of the proportion of women who married during adolescence.

[Table 2 about here]

Since the focus of this paper is on adolescent childbearing, it is important to examine the proportion married by age 20, the end of the adolescent years. The relevance of examining the proportion of females married as teenagers also comes from evidence showing that marriage during the teenage years does not generally satisfy the preconditions for a successful transition to adult roles, which include the opportunity to acquire an appropriate amount of social and human capital, the knowledge to sustain health during adulthood and the capability to make choices through the acquisition of a sense of self and competence (Lloyd 2005). In addition, higher marriage prevalence at very younger ages is generally related to higher fertility rates.

Despite the fact that marriage is by and large universal, most of the countries in Table 2 show evidence of a trend toward later marriage, with smaller proportions of females married by age 20 in the younger than in the older cohort, as well as in the current cohort, where data are available. Overall, the results confirm a postponement of marriage, with fewer proportions of females married by age 20 in the younger than in the older cohorts. The major exception is Latin America and the Caribbean, where most countries show either a moderate decline or stability throughout cohorts, although the levels of adolescent marriage were already reasonably low in the older cohort. Other exceptions are the countries where I find increases in the proportion married as adolescents: in Africa (Madagascar, Mozambique and Chad), Asia (Kyrgyz Republic, Kazakhstan, Cambodia and Armenia) and Eastern Europe (Romania and Moldova).

The proportion married by age 20 in the younger cohort is highest in some of the least developed countries. Among women in the younger cohort, this proportion is highest in Sub-Saharan Africa, where, for example, 88.4% and 86.4% of females were married by age 20 in Niger and Guinea, respectively. Guinea shows some decline, from 86.4% in the younger cohort

to 74.8% in the current cohort. Among the countries with data on the current cohort of adolescents, the highest proportions of adolescent marriage are found in Chad, Niger and Mali, all above 80%.

Burkina Faso, the Central African Republic, Ethiopia, Malawi, Mali, Mozambique and Uganda all show proportions of women married by age 20 greater than 70% in the younger cohort. With the exception of the Central African Republic, all of these countries have available data for the current cohort but only Ethiopia shows current levels lower than 70%. In contrast, in Namibia and in South Africa less than 20% of women in the younger cohort were married by age 20, with South Africa showing 14.2%, confirming a trend of late marriage found in other studies (Quisumbing and Hallman 2005). No other country in Africa with available DHS data shows the proportion of females married by age 20 smaller than 20% for the current cohort of women.

In general, Asian countries present lower levels of adolescent marriage than the African ones, with the important exception of South-central Asian countries, particularly Bangladesh, India and Nepal. Although the proportions of females married by age 20 have declined in all of these three countries, they are still very high—all above 70% for females born in the 1980s. Extremely high proportions of adolescent marriage in the younger cohort are also found in Asia, particularly in Bangladesh (87.6%) and Nepal (84.7%). The rates also declined in Turkmenistan, while they have increased in Kazakhstan and in the Kyrgyz Republic, and remained stable in Uzbekistan.

In all countries in South-eastern Asia the rates have gone down, with the exception of Cambodia and Vietnam that presented an increase in the proportion of females married during adolescence. In the Philippines the levels remained relatively stable around 32% from the younger to current cohorts. In Western Asia, the only country where we see an increasing proportion of marriages by the age of 20 is Armenia. All other countries in this region show declines, some at high levels such as Jordan (from 54.2% to 30.5%) and Yemen (from 83.9% to 63.6%).

In the Eastern European countries where there are trend data available on the proportions married by age 20, we see increases in Romania, Ukraine and the Republic of Moldova, whereas there are declines in Russia and stability in the Czech Republic. In Albania, the only Southern European country in Table 2, the proportion of females married during adolescence remained relatively stable and currently 27.8% of 20-24 year-olds have married by age 20.

In most Latin American and Caribbean countries the proportions of females married by age 20 have remained virtually unchanged from the older to the younger and current cohorts. In Guatemala there was a slight increase from the older to the younger cohorts. In Haiti the increase was more substantial, from 39.3% to 47.1% and remaining around this level for the current cohort. In all other countries in the region where data are available, I find a pattern of stability throughout cohorts. In Central America the lowest proportions of women married by age 20 in the younger cohort are found in Costa Rica (37%). In South America, Paraguay shows the lowest proportion of females married during adolescence (33.2%).

Proportion ever married by ages 15-19 and 20-24

Table 3 shows the percentage of females and males ages 15-19 and 20-24 who have ever been married by the time of the latest available data for each country. Although this indicator does not provide a sense of temporal trend, the advantage of using it is that this information is available for a large set of places, allowing for comparisons across countries with very different levels of adolescent marriage. Another advantage is the possibility of comparing males and females, as these type of data are often available for both groups.

[Table 3 about here]

Very high levels of adolescent female marriage (higher than 20%) are found in almost all countries in Eastern, Middle, Northern and Western Africa. Southern Africa on the other hand is noteworthy for late marriage and shows very low levels of adolescent female marriage. We also see very high proportions of adolescent female marriage in some countries in South-central Asia, in Central America as well as in Yemen, Ecuador and the Dominican Republic. In contrast, the proportion of female adolescents married is very low (smaller than 5%) in Eastern Asia and in parts of Western Asia, in addition to Singapore. Adolescent marriage was virtually inexistent in most of Europe, with the exceptions of Bulgaria (10%), Romania (12%), Albania (9.6%) and Macedonia (9.1%). Adolescent marriage was also very infrequent in most Caribbean countries, with the exception of Haiti and the Bahamas. The levels of the proportions of females married at ages 15-19 are quite high in some Central American countries and moderate in South America.

Table 3 also shows that the proportions ever married by ages 15-19 and 20-24 are very different for males and females. In all countries the proportion of females married is higher than the proportion of males married by both ages 15-19 and 20-24, which confirms the trend that females marry earlier than males. It is also interesting to note that in some countries, the gender differences in these proportions are very high, demonstrating a larger age difference between spouses. The countries where the gender difference in the proportion ever married by ages 15-19 is larger than 33% are mainly in Western Africa, in addition to Chad in Middle Africa, and Niger and Sierra Leone in Western Africa. When examining the proportion ever married at ages 20-24, I find that the largest gender differences are mainly in Eastern and Western Africa, in addition to Chad in Middle Africa, South-central Asia, Oman and the Occupied Palestinian Territory in Western Asia, Albania in Southern Europe and the Solomon Islands in Melanesia.

Timing of first sexual intercourse

The focus on timing of sexual initiation is important because at what time individuals start their sexual life implies risks of both pregnancy and childbearing, as well as of transmitting and contracting sexually transmitted diseases (STDs) and HIV/AIDS. An adolescent who initiates his/her sexual life by age 15 will have more exposure to STDs, pregnancy and childbearing than one who initiates sexual life by ages 18 or 20, for example, and this will have consequences for overall adolescent fertility.

The evidence on the timing of first sexual initiation points to several important implications on adolescence childbearing. First, early entry into sexual life and the context within which sexual intercourse begins are key indicators of adolescents' potential risk for unplanned pregnancy, abortion and sexually transmitted diseases (Singh et al 2000). It is true, however, that early sexual initiation appears to lead to STD transmission and abortion in developed countries, but not so frequently to childbearing as in developing countries. Second, first intercourse may be preceded by other sexual activities, some of them risky (Dixon-Mueller 2007). It has also been found that, in most countries, sexual intercourse during adolescence occurs predominantly outside marriage among males but largely within marriage among females (Singh et al. 2000). Teenage girls in situation of poverty and social disadvantage generally involve even earlier in sexual activities with consequences of frequent infection and abortion, as well as childbearing. There has also been empirical evidence showing that girls appear vulnerable to dropout of

school once they become sexually mature and once they engage in premarital sex, at least in Sub-Saharan Africa (Biddlecom et al 2007).

The proportion of young adults (20-24) who have had sexual intercourse and the proportion of individuals who had initiated sexual activity during adolescence are oftentimes used to describe timing of sexual intercourse among adolescents (Blanc and Way 1998; Singh et al. 2000). Another frequent indicator is the median age of sexual debut (Bajos et al. 2003; Singh et al. 2000). This measure reflects the age at which 50% of a specific population group had begun sex.

Due to comparability reasons, I opted to examine the median age at first sexual intercourse—a measure that is found for two cohorts in most of the DHS, FFS and CDC data available. By combining data from these surveys I can provide an overall picture of the timing of first sexual intercourse that includes several countries around the world and for two cohorts. I examined the median age at first sexual intercourse for older and younger cohorts of females to establish the current levels and trends of timing of first sex, and also provided the same information for current cohorts of adolescents where data are available.

Table 4 shows the median age at first sexual intercourse among females in older and younger cohorts by country. In African countries the majority of girls have already had sexual intercourse before age 18 both in the older and in the younger cohorts. Among African females in the older cohort, the median age at first sex ranged from 15.5 in Liberia to 20.3 in Namibia. With a few important exceptions, we see a pattern of increase in the median ages of first sexual intercourse in almost all African countries. Despite that increase, results from Table 4 show that first sexual intercourse happens during adolescence for at least half of the females in the current cohort in all countries in the region. Half of the females in the younger cohort had sexual debut before age 16 in Niger, Mali, Guinea, Congo and Chad. For this cohort, the youngest median ages at sexual debut were found in Western Africa.

[Table 4 about here]

The largest increase in the median age at first sex reported in Eastern Africa is in Eritrea, in the magnitude of 1.9 years. The median ages showed a slight decline in Mozambique (from 16.6 to 16) and remained virtually unchanged in Madagascar, Malawi and Uganda. We see stability in

all Middle African countries, with the exception of Gabon, where the median raised from 15.8 to 16.3. In Southern Africa there are the largest declines in the median age of first sexual intercourse of the whole continent. In South Africa, the median age at first sex went from 18.7 to 17.8, while in Namibia it went from 20.3 to 18.8. The medians remained virtually unchanged in most Western African countries, with the exception of Nigeria, Senegal and Mauritania where they declined by at least one year. In Mauritania the median age of first sex declined by 3 years.

In South-central Asia the median ages of first sexual intercourse females in the older cohort ranged from 16.5 in Nepal to 21.0 in Kazakhstan. The median has increased by at least one year in most South-central Asian countries. Half of the women in both the older and younger cohorts had sexual intercourse by the age of 19.7 in Uzbekistan.

I find no definite pattern of the cohort trend in the median age at sexual initiation in South and Southeast Asia. Of the countries I have trend data available in South-eastern Asia, the median age at sexual debut practically did not change in Cambodia and it increased in Indonesia and the Philippines—from 18.4 to 23.8 in Indonesia and from 21.7 to 22.1 in the Philippines. I also find declines in the median age of sexual initiation in Western Asia—from 21.4 to 19.8 in Armenia and from 22.6 to 21.5 in Azerbaijan.

All European countries for which I have data trend available show a decline in the median age at first sexual intercourse, with the exception of Italy and France. Since there are no data available for current cohort of adolescents, the younger cohort is the latest for which I have systematic information allowing comparisons of European countries. When comparing cohorts born early last century and in the late 1980s and early 1990s, some argue that the decline in the age at sexual initiation in Europe would have been much more pronounced if it had not been for the AIDS prevention campaigns of the late 1980s (Bajos et al. 2003). Half of the Italian females have had their first sexual intercourse by the age of 20.4 in the older cohort and by the age of 21.7 in the younger cohort. The median showed virtually no change in France, while it has declined in all countries of Northern, Eastern and Southern Europe. In fact, all countries in Northern Europe show a decline of at least one year while Lithuania presents the oldest median age, 19.5. The declines are slightly smaller in Eastern and Southern Europe, with the exception of Spain where the median age of first sex declined from 22.4 to 20.1 across the cohorts examined.

Latin American and Caribbean countries show a mixed pattern of decline and stability in the median ages at first sex. In the Dominican Republic the median age has remained constant across the cohorts analyzed, while in Haiti it has decreased from 18.7 to 18.0. Guatemala is the only country in the entire region where the median age of first sex has increased—from 18.4 to 19.0. The median age of first sexual intercourse has remained virtually constant in Honduras and declined by .4 years in Nicaragua. I also see stability in Bolivia and Peru whereas Colombia and Brazil show declines. In fact, Brazil presents the largest decline in the median age at first sex of the entire region—1.2 years.

I find an overall pattern of moderate rising age at sexual initiation in developing countries. Overall, the median ages at first sexual intercourse are lower in most of Africa than in all other regions, although several African countries show an increase in the median age at first sex across the cohorts examined. However, I do not find a single consistent pattern of increase across the regions as the medians have declined or not changed in some countries. Latin American and Caribbean countries show a mixed pattern of decline and stability in the median ages at first sex, while the levels are significantly higher in South-central, South-eastern and Western Asia than in all other developing regions. In most of Europe I find a trend of moderate decline in the female median age of sexual initiation.

Adolescent Fertility and Total Fertility

In this section I created a typology for adolescent fertility using information on total fertility, marriage and contraceptive use. I created each classification using data from the tables described above. First, I ranked all countries where data on total fertility rate and adolescent fertility rate was available into four categories: low, medium low, medium high and high. The goal is to establish the countries where the classification of the total fertility rate and the adolescent fertility rate matches at the same level and the countries where the classification does not conform. Table 5 shows the results of the classification of countries by total fertility rates and adolescent fertility rates.

Results from Table 5 show that total fertility rates and adolescent fertility rates conform in the majority of the countries in the world with data available. It is also evident from the typology that adolescent fertility does not conform to total fertility in a non-trivial number countries, with adolescent childbearing falling in a higher- and in a lower-level category than total fertility.

Adolescent fertility rates are classified in a higher category than total fertility rates in Barbados, Bermuda, Brazil, Bulgaria, Cuba, El Salvador, Georgia, Mauritius, Northern Mariana Islands, Puerto Rico and Seychelles, while adolescent fertility rates are classified in a lower category than total fertility rates in Israel, Malaysia, Oman, Burundi, Djibouti, Rwanda, Samoa, Wallis and Futuna Islands and Tonga.

There are several potential reasons for such a mismatch. One potential reason is a fertility schedule that does not conform to the one typical of fertility decline, such as Brazil. While I verify a delay in childbearing in most low-fertility countries throughout the process of fertility decline country, there has been an increasing rejuvenation of the fertility schedule in Brazil. Despite its below replacement fertility levels, the country has shown a rise in adolescent childbearing in the 1990s (Berquó and Cavenaghi 2006). Although adolescent childbearing rates have leveled off in the 2000s, they are still higher than what would be expected for a country with below fertility levels. Another likely reason for the mismatch between the levels of adolescent fertility and total fertility is the influence of tempo effects (Bongaarts 1999). Changing in the timing of childbearing can cause these distortions and the size, timing, duration, and even the direction of tempo effects may vary among populations.

Another interesting case of mismatch between total fertility and adolescent fertility levels is Bulgaria. The country ranks among one of the highest adolescent fertility rates in Europe due to low ages of sexual debut and early age at marriage or cohabitation combined with low levels of modern contraceptive use. However, the dramatic increases in the use of modern contraceptives among women younger than 25 who entered their reproductive period after the end of socialism might affect adolescent childbearing rates (Carlson and Lamb 2001).

One limitation of this approach is that the classification into four levels is based on the distribution of fertility rates in all countries, therefore being a relative measure. However, since I was able to include most countries in the world for which there is data available, the classification is likely true.

Conclusions

Adolescence is a period of key transitions in individuals' lives. During the teenage years, there is rapid physical, social, psychological and economic development as well as learning and skills

building, along with risk and vulnerability. Social, economic and biological transitions set the stage for adult life as they shape adolescents' entire future. The first goal of this paper was to examine the levels and trends of three important transitions to adulthood for all countries in the world: childbearing, marriage and sexual debut.

The second goal of this paper was to provide a categorization of adolescent fertility in relation to total fertility.

Results show that although not the norm, adolescent birth rates have increased from the 1980s to the mid-2000s in several countries in Latin America and Africa, and in a few Asian countries. I also document a mismatch between the relative levels of total fertility and adolescent fertility in a non-trivial number of countries.

Despite the fact that marriage is by and large universal, I find evidence of a trend toward later marriage, with smaller proportions of females married by age 20 in the younger and current cohorts than in the older cohort. Overall, the results confirm a postponement of marriage, with fewer proportions of females married by age 20 in the younger than in the older cohorts. The major exception is Latin America and the Caribbean, where most countries show either a moderate decline or stability throughout cohorts, although the levels of adolescent marriage were already reasonably low in the older cohort. Although adolescent marriage (married by age 20) is prevalent in most countries examined, more than half showed a decrease of 40% or more in the prevalence of child marriage (married by age 15). Further analyses of adolescent marriage confirm the trend that females marry earlier than males.

This paper results' also indicate an overall pattern of moderate rising age at sexual initiation in developing countries. However, the results do not identify a single consistent pattern of increase across the regions as the medians have declined or not changed in some countries.

Although not necessarily causal, early childbearing, marriage and sexual debut can have staggering consequences for adolescents, for the most part truncating their schooling and limiting their paths into successfully transitioning to adulthood. Although my results show important advances in deterring early transitions to adulthood, there is still the need for

improvements in offering adolescents with conditions for delaying childbearing and marriage, and in hindering the decreases in the age of sexual debut in several countries in the world.

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Tables and Figures

Table 1. Adolescent Age-specific Fertility Rates (per 1000 women ages 15-19)

Country or area	Earliest Year	15-19	Latest Year	15-19	Earliest Year	15-19	Latest Year	15-19	Country or area	Earliest Year	15-19	Latest Year	15-19	Country or area	Earliest Year	15-19	Latest Year	15-19	
Eastern Africa									Southern Africa					South-Eastern Asia					
Burundi	1980	93	2000-2002	120			2000-2001	70	Botswana	1986	125	2001	51	Kyrgyzstan	1986	42	2004	27	
Comoros	1994	66	1996	30	1986	125	2001	51	Lesotho	1991	54	2003	98	Maldives	1988	15	2006	8	
Djibouti	1991	31	2002	27	1991	54	2003	98	Namibia	1990	101	1998	88	Nepal	1991	98	2004	106	
Eritrea	1994	116	2000	85	1988	124	2001	65	South Africa	1988	124	2001	65	Pakistan	1989	84	2003	24	
Ethiopia	1990	95	2003	109	1986	88	1997	73	Swaziland	1986	88	1997	73	Sri Lanka	1986	37	1996	29	
Kenya	1987	152	2001	116	1986	88	2000-2001	147	Western Africa					Turkmenistan	1989	22	1998	29	
Madagascar	1990	156	2001	154	1994	123	1999	108	Benin	1994	123	1999	108	Uzbekistan	1989	42	2001	40	
Malawi	1990	159	2003	160	1991	154	2001	131	Burkina Faso	1991	154	2001	131	South-Eastern Asia					
Mauritius	1990	45	2002	36	1990	85	1996	104	Cape Verde	1990	85	1996	104	Brunei Darussalam	1986	36	2000	31	
Mozambique	1995	173	2001	185	1988	193	2003	132	Côte d'Ivoire	1988	193	2003	132	Cambodia	1989	174	2003	52	
Réunion	1986	49	2003	37	1986	124	2001	74	Ghana	1986	124	2001	74	Indonesia	1988	71	2001	54	
Rwanda	1991	56	2003	44	1992	157	2003	153	Guinea	1992	157	2003	153	Laos	1992	115	2005	110	
Seychelles	1986	78	2005	60	1994	198	1999	192	Mali	1994	198	1999	192	Malaysia	1986	24	2000	12	
Uganda	1987	187	2004	159	1989	81	2001	88	Mauritania	1989	81	2001	88	Myanmar	1988	43	1999	29	
Tanzania	1990	139	2003	139	1990	219	2004	199	Niger	1990	219	2004	199	Philippines	1991	52	2001	55	
Zambia	1990	152	2000	161	1989	144	2002	126	Nigeria	1989	144	2002	126	Singapore	1986	9	2004	7	
Zimbabwe	1986	109	2004	101	1992	132	2003	100	Senegal	1992	132	2003	100	Thailand	1986	43	1995	70	
Middle Africa									Sierra Leone	1984	202	2003	118	Viet Nam	1991	38	2000	25	
Angola	1983	190	1996	146	1986	127	1996	89	Togo	1986	127	1996	89	Western Asia					
Cameroon	1989	174	2002	141			2000-2001	2	Eastern Asia					Armenia	1986	57	2004	30	
Chad	1995	194	2002	193	1986	19	2002	3	China	1986	19	2002	3	Azerbaijan	1986	21	2004	31	
Congo	1988	130	2003	132	1986	7	2005	4	China, Hong Kong	1986	7	2005	4	Bahrain	1986	40	2000	14	
Congo	1992	125	2001	201	1986	7	2004	4	China, Macao	1986	7	2004	4	Cyprus	1986	28	2003	5	
Equatorial Guinea	1983	147	2001	128	1986	4	2004	6	Japan	1986	4	2004	6	Georgia	1986	49	2004	47	
Gabon	1983	189	2000	142	1986	32	2000	28	Mongolia	1986	32	2000	28	Iraq	1991	40	2000	17	
Sao Tome and Principe	1991	107	2001	91	1986	8	2004	2	Republic of Korea	1986	8	2004	2	Israel	1986	22	2004	15	
Northern Africa									South-Central Asia					Jordan	1988	52	2001	30	
Algeria	1986	35	1998	6	n.a	n.a	2000-2001	69	Afghanistan	n.a	n.a	2001	151	Kuwait	1986	44	2004	15	
Egypt	1986	83	2003	48	1987	176	2003	135	Bangladesh	1987	176	2003	135	Lebanon	1986	72	2001	17	
Libyan Arab Jamahiriya	1993	7	2000	14	1993	120	2000	62	Bhutan	1993	120	2000	62	Occupied Palestinian	1991	98	2006	60	
Morocco	1990	45	2002	35	1992	116	2004	97	India	1992	116	2004	97	Oman	1988	13	2003	11	
Tunisia	1986	28	1999	8	1986	148	2000	35	Iran	1986	148	2000	35	Qatar	1986	62	2004	19	
Turkey	1986	64	2001	51	1987	41	2003	26	Kazakhstan	1987	41	2003	26	Saudi Arabia	1987	55	2004	15	
														Syrian Arab Republic	1991	71	1999	58	

Table 1. Adolescent Age-specific Fertility Rates (per 1000 women ages 15-19) (continued)

Country or area	Earliest Year	15-19	Latest Year	15-19	Country or area	Earliest Year	15-19	Latest Year	15-19	Country or area	Earliest Year	15-19	Latest Year	15-19
United Arab Emirates	1987	55	1996	37	Malta	1986	13	2002	17	Central America	1986	129	2000-	79
Yemen	1991	104	2002	83	Montenegro	1980	18	2005	16	Belize	1986	129	2002	90
Eastern Europe					Portugal	1986	29	2004	19	Costa Rica	1987	97	2003	77
Belarus	1986	33	2004	28	San Marino	1986	11	2003	6	El Salvador	1986	108	2001	104
Bulgaria	1986	80	2002	40	Serbia	1981	49	2005	24	Guatemala	1986	121	2000	120
Czech Republic	1986	51	2003	11	Slovenia	1986	37	2003	6	Honduras	1987	135	2003	108
Hungary	1986	49	2004	21	Spain	1986	17	2002	10	Mexico	1986	94	2000	94
Moldova	1987	45	2003	29	Macedonia	1986	45	2004	23	Nicaragua	1986	110	1999	119
Poland	1986	33	2004	14	Western Europe				9	Panama	1986	93	2002	84
Romania	1986	63	2003	33	Austria	1986	24	2004	14	South America				
Russian Federation	1986	47	2004	28	Belgium	1986	12	1997	5	Argentina	1986	75	2001	62
Slovakia	1986	51	2002	21	France	1986	11	2003	8	Bolivia	1987	94	2001	97
Ukraine	1986	53	2003	29	Germany	1987	15	2004	11	Brazil	1986	58	2000	71
Northern Europe					Liechtenstein	1986	6	2004	8	Chile	1986	58	2003	49
Channel Islands	1981	16	1996	24	Luxembourg	1986	10	2004	11	Colombia	1988	70	2003	92
Denmark	1986	10	2004	6	Netherlands	1986	7	2003	7	Ecuador	1987	55	2004	100
Estonia	1986	42	2003	21	Switzerland	1986	7	2002	5	French Guiana	1996	107	2003	104
Finland	1986	13	2004	11	Caribbean				69	Guyana	1980	95	2003	90
Iceland	1986	31	2003	16	Aruba	n.a	n.a.	2002	37	Paraguay	1989	98	2003	65
Ireland	1986	16	2003	19	Bahamas	1986	60	2003	46	Peru	1990	68	2002	59
Latvia	1986	45	2004	16	Barbados	1986	50	2003	51	Suriname	1989	73	2003	62
Lithuania	1986	23	2004	19	Cuba	1986	79	2003	47	Uruguay	1986	59	2002	64
Norway	1986	18	2004	8	Dominican Republic	1989	91	2001	118	Venezuela	1986	95	2002	81
Sweden	1986	11	2002	7	Grenada	1997	71	2000	53	Northern America				
United Kingdom	1986	30	2002	27	Guadeloupe	1986	18	2003	25	Canada	1987	23	2003	14
Faeroe Islands	1986	35	2006	13	Haiti	1986	88	2003	69	U.S. of America	1986	51	2002	43
Southern Europe					Jamaica	1986	95	2004	65	Bermuda	1987	38	2002	33
Albania	1986	16	2001	27	Martinique	1986	32	2003	26	Greenland	1980	67	2000	61
Bosnia & Herzegovina	1986	38	1998	25	Netherlands Antilles	n.a	n.a.	2004	41	Australia/New Zealand				
Croatia	1986	36	2004	14	Puerto Rico	1987	70	2003	59	Australia	1986	21	2003	16
Greece	1986	33	2003	11	Saint Lucia	1986	112	2002	51	New Zealand	1986	30	2004	27
Italy	1986	11	2003	7	Saint Vincent and the Trinidad & Tobago	1986	74	2000	71	Melanesia				
					United States Virgin	1986	73	2002	35	Fiji	1986	53	2002	35
							90	2002	49	New Caledonia	1987	44	2003	20

Table 1. Adolescent Age-specific Fertility Rates (per 1000 women ages 15-19) (continued)

Country or area	Earliest		Latest	
	Year	15-19	Year	15-19
Papua New Guinea	1994	77	2000	70
Solomon Islands	1985	101	1998	72
Vanuatu	1989	78	1999	92
Micronesia			2000-2005	46
Guam	1986	84	2003	53
Palau	1989	51	2005	31
Federated States of	1980	68	2000	51
Kiribati	1987	76	2000	71
Marshall Islands	1988	162	1999	94
Nauru	1994	78	1999	93
Northern Mariana Islands	1988	107	2000	64
Polynesia			2000-2005	36
French Polynesia	1986	96	2006	50
Samoa	1991	26	2001	45
Tonga	1996	20	2003	17
American Samoa	1990	52	2000	56
Cook Islands	1988	70	2001	47
Niue	1994	35	2003	25
Tokelau	1993	83	1999	45
Tuvalu	1991	41	2001	40
Wallis and Fortuna	1996	18	2003	10

Source: Census Data, Vital Registration and Survey data.

* Adolescent is defined as women ages 15 to 19.

Table 2. Proportion of Females Married by Ages 15, 18 and 20 by Cohort: Selected DHS Countries

Data	15			18			20			
	Older Cohort	Younger Cohort	Current cohort	Older Cohort	Younger Cohort	Current cohort	Older Cohort	Younger Cohort	Current cohort	
Eastern Africa										
Burundi	4.1	0.2	na	29.1	na	na	57.5	na	na	na
Comoros	9.6	9.2	na	34.5	29.7	na	51.0	39.8	na	0.22
Eritrea	24.6	16.2	8.5	53.5	46.4	47.0	64.9	62.6	na	0.04
Ethiopia	38.0	31.9	12.7	70.8	64.3	49.2	83.0	77.7	62.4	0.06
Kenya	12.6	6.2	3.5	42.1	28.0	24.6	60.1	48.0	45.2	0.20
Madagascar	9.7	10.0	8.8	42.0	39.5	38.8	59.4	59.4	60.5	0.01
Malawi	15.3	12.7	6.2	49.2	47.5	48.9	69.6	72.4	73.1	-0.04
Mozambique	21.7	21.2	14.0	49.4	56.4	55.9	65.7	74.7	74.9	-0.14
Rwanda	3.3	2.7	0.2	22.8	14.9	13.3	45.3	35.7	29.1	0.21
Uganda	18.4	12.3	3.0	57.9	46.3	46.3	74.6	66.7	66.7	0.11
Tanzania	15.5	7.3	4.6	56.2	36.2	41.1	71.2	61.5	62.4	0.14
Zambia	21.5	8.0	3.1	57.8	41.9	41.6	75.8	63.4	59.2	0.16
Zimbabwe	10.4	9.0	2.6	38.0	33.3	33.6	64.3	56.8	56.0	0.12
Middle and Northern Africa										
Benin	9.5	10.3	5.0	39.2	40.3	36.7	61.6	63.7	58.5	-0.03
Cameroon	23.1	20.4	11.2	60.9	49.2	47.2	74.3	64.4	64.0	0.13
Chad	34.1	33.5	17.9	70.5	72.0	71.5	79.9	86.2	85.6	-0.08
Congo (Brazzaville)	13.2	6.5	3.7	41.0	23.6	30.8	58.1	41.2	50.4	0.29
CAR	26.2	19.6	na	64.6	57.0	na	80.6	73.5	na	0.09
Egypt	12.8	8.0	1.0	35.8	27.0	16.6	51.5	43.4	34.1	0.16
Gabon	20.8	9.8	na	50.2	33.7	na	61.0	47.1	na	0.23
Morocco	14.2	5.7	1.6	40.9	23.3	15.9	58.0	35.8	26.3	0.38
Sudan	33.4	4.9	na	61.3	na	na	72.9	na	na	na
Tunisia	1.2	0.1	na	16.5	na	na	35.7	na	na	na
Southern Africa										
Botswana	2.5	0.4	na	17.6	na	na	31.5	na	na	na
Lesotho	7.4	4.1	1.4	44.7	25.6	23.0	73.5	49.5	44.0	0.33
Namibia	4.4	2.1	1.1	12.5	9.1	8.5	24.8	15.9	15.6	0.36
South Africa	3.1	1.1	na	15.1	7.9	na	30.3	14.2	na	0.53
Western Africa										
Burkina Faso	5.9	8.4	4.2	57.5	58.5	51.9	82.2	79.6	75.6	0.03
Cote d'Ivoire	16.6	9.5	na	49.7	33.2	na	66.1	49.5	na	0.25
Ghana	10.0	7.6	2.5	33.1	31.3	27.9	53.7	50.4	46.8	0.06
Guinea	27.3	24.3	12.2	72.7	74.8	63.1	84.1	86.4	74.8	-0.03
Liberia	14.6	13.6	5.8	44.2	41.3	37.9	62.9	57.7	51.4	0.08
Mali	19.1	23.7	22.8	66.0	66.1	70.6	78.5	82.3	85.5	-0.05
Mauritania	36.0	25.6	na	58.8	43.6	na	70.7	55.9	na	0.21
Niger	33.4	40.3	28.0	78.9	79.4	74.5	88.7	88.4	85.4	0.00
Nigeria	43.5	25.5	16.1	70.6	47.0	43.3	79.2	58.4	55.5	0.26
Senegal	16.3	14.6	10.2	56.7	46.1	39.0	73.3	60.9	56.4	0.17
Swaziland	4.7	1.4	0.3	19.2	8.5	5.0	30.6	16.9	13.0	0.45
Togo	9.8	8.3	na	40.4	30.5	na	61.0	48.4	na	0.21

South-central and south-eastern Asia		64.7	41.3	21.1	0.36	90.1	75.4	66.2	0.16	95.3	86.4	79.2	0.09
Bangladesh	2007	64.7	41.3	21.1	0.36	90.1	75.4	66.2	0.16	95.3	86.4	79.2	0.09
India	2006	21.2	18.6	8.2	0.12	57.8	52.1	44.5	0.10	77.0	70.9	63.3	0.08
Kazakhstan	1999	0.7	0.3	na	0.57	8.4	14.4	na	-0.71	35.5	39.9	na	-0.12
Kyrgyz Republic	1997	0.0	0.1	na	na	15.7	21.2	na	-0.35	46.7	58.4	na	-0.25
Nepal	2006	24.7	15.3	5.5	0.38	69.4	59.9	51.4	0.14	84.7	79.0	70.9	0.07
Pakistan	2007	14.6	10.7	3.5	0.27	44.2	31.3	24.0	0.29	63.9	48.0	35.7	0.25
Sri Lanka	1987	2.3	0.6	na	0.74	13.6	na	na	na	28.6	na	na	na
Turkmenistan	2000	0.6	0.2	na	0.67	16.8	6.5	na	0.61	49.1	26.4	na	0.46
Uzbekistan	1996	0.2	0.4	na	-1.00	18.0	15.3	na	0.15	56.2	55.7	na	0.01
Cambodia	2005	3.3	3.4	1.2	-0.03	18.8	27.0	23.3	-0.44	44.6	51.6	42.4	-0.16
Indonesia	2007	16.8	5.1	1.7	0.70	46.6	24.0	22.0	0.48	65.0	43.4	40.7	0.33
Philippines	2003	3.2	2.7	1.2	0.16	18.4	13.4	14.0	0.27	35.3	31.9	32.7	0.10
Thailand	1987	2.6	2.0	na	0.23	24.9	na	na	na	44.5	na	na	na
Vietnam	2002	1.2	1.6	0.3	-0.33	11.6	17.1	11.1	-0.47	32.6	40.2	na	-0.23
Western Asia													
Armenia	2005	0.6	0.3	0.3	0.50	10.5	23.7	9.9	-1.26	31.8	52.1	26.8	-0.64
Azerbaijan	2006	0.4	0.8	0.4		9.2	16.3	12.2	-0.77	29.9	34.7	30.6	-0.16
Jordan	2007	6.3	1.4	0.3	0.78	28.8	13.0	9.6	0.55	47.7	25.6	21.9	0.46
Turkey	1998	10.8	4.2	na	0.61	43.0	23.0	na	0.47	66.2	42.8	na	0.35
Ukraine	2007	0.4	0.6	0.1		8.1	14.4	9.9	-0.78	34.0	38.8	30.6	-0.14
Yemen	1997	30.8	14.0	na	0.55	74.8	48.4	na	0.35	83.9	63.6	na	0.24
Caribbean and Central America													
Dominican Republic	2007	14.5	14.2	9.6	0.02	41.4	44.8	39.6	-0.08	60.3	62.6	53.7	-0.04
El Salvador	1985	10.7	na	na	na	38.4	37.7	na	0.02	56.7	na	na	na
Guatemala	1999	9.8	9.3	na	0.05	33.6	34.3	na	-0.02	49.2	55.5	na	-0.13
Haiti	2005	5.3	7.8	5.6	-0.47	21.8	31.9	29.9	-0.46	39.3	47.1	47.9	-0.20
Honduras	2005	10.8	10.3	7.0	0.05	40.7	41.3	38.8	-0.01	59.9	60.7	54.4	-0.01
Costa Rica	1994	5.0	4.0	na	0.20	25.0	22.0	na	0.12	39.0	37.0	na	0.05
Mexico	1987	10.5	3.5	na	0.67	35.3	na	na	na	53.3	na	na	na
Nicaragua	2001	14.0	15.7	na	-0.12	45.6	48.7	na	-0.07	65.0	66.4	na	-0.02
Trinidad and Tobago	1987	5.5	6.6	na	-0.20	31.7	na	na	na	52.7	na	na	na
South America													
Bolivia	2003	4.3	3.7	2.4	0.14	23.1	23.9	25.8	-0.03	40.6	42.8	42.8	-0.05
Brazil	1996	3.4	4.4	na	-0.29	21.0	23.7	na	-0.13	39.3	38.8	na	0.01
Colombia	2005	4.4	4.8	4.5	-0.09	22.0	23.3	23.1	-0.06	39.0	37.7	38.7	0.03
Ecuador	1987	8.0	4.4	na	0.45	28.3	na	na	na	48.5	na	na	na
Paraguay	2004	1.9	2.0	1.5	-0.05	21.5	25.0	17.9	-0.16	39.2	33.2	33.2	0.15
Paraguay	1990	2.4	2.7	na	-0.13	20.3	na	na	na	38.8	na	na	na
Peru	2000	4.2	3.6	na	0.14	24.6	21.9	na	0.11	40.9	37.2	na	0.09

Source: Demographic Health Surveys.

Notes: Younger cohort means women born in the 1970s and early 1980s and therefore experiencing adolescence during the late 1980s and 1990s; Older cohort means women born in the 1950s and early 1960s and therefore experiencing adolescence during the mid 1960s and in the 1970s.

Table 3. Percentage of ever married adolescents and young adults by sex

	Men				Women				
	Year	Data	15-19	20-24	Year	Data	15-19	20-24	
Eastern Africa									
Burundi	1990	Census	0.8	26.7	1990	Census	7.0	60.2	
Comoros	1996	DHS	3.1	15.0	1996	DHS	11.5	48.4	
Eritrea	..	..	..	..	2002	DHS	31.0	72.7
Ethiopia	2000	DHS	3.4	23.7	2000	DHS	30.0	73.1	
Kenya	2003	DHS	1.9	20.8	2003	DHS	20.3	63.8	
Madagascar	2004	DHS	6.5	44.3	2004	DHS	33.0	73.7	
Malawi	2000	DHS	4.0	41.8	2000	DHS	36.8	87.7	
Mauritius	2000	Census	0.6	11.5	2000	Census	9.8	49.9	
Mozambique	..	..	..	..	2003	DHS	43.3	84.4
Réunion	1999	Census	0.2	3.4	1999	Census	1.2	12.6	
Rwanda	2000	DHS	1.5	28.7	2000	DHS	7.2	58.5	
Uganda	2002	Census	6.4	40.1	2002	Census	29.7	75.3	
United Republic of Tanzania	2004	DHS	1.3	34.6	2004	DHS	27.9	76.2	
Zambia	2002	DHS	1.8	31.3	2002	DHS	27.0	75.4	
Zimbabwe	1999	DHS	0.6	23.3	1999	DHS	22.6	71.8	
Middle Africa									
Cameroon	..	..	..	..	2004	DHS	33.2	76.6
Central African Republic	1995	DHS	8.1	45.6	1995	DHS	42.3	81.2	
Chad	2004	DHS	1.1	38.0	2004	DHS	45.3	90.3	
Gabon	2000	DHS	4.0	29.2	2000	DHS	22.4	61.3	
Sao Tome and Principe	1991	Census	1.9	28.0	1991	Census	19.9	61.7	
Northern Africa									
Algeria	..	..	..	..	1992	Survey	3.6	29.6
Egypt	..	..	..	..	2000	DHS	11.9	54.4
Libyan Arab Jamahiriya	1995	MCHS	0.1	1.3	1995	MCHS	1.0	12.2	
Morocco	..	..	..	..	2004	DHS	11.0	38.3
Sudan	1993	Census	1.8	14.1	1993	Census	20.6	55.4	
Tunisia	1994	Census	0.0	3.7	1994	Census	3.0	27.7	
Southern Africa									
Botswana	2001	Census	1.0	9.1	2001	Census	4.4	24.9	
Lesotho	1986	Census	1.6	25.9	1986	Census	18.1	70.4	
Namibia	2000	DHS	2.5	16.5	2000	DHS	6.1	27.8	
South Africa	1996	Census	0.8	8.6	1996	Census	3.4	22.3	
Swaziland	1991	Census	1.0	14.6	1991	Census	9.1	39.7	
Western Africa									
Benin	2001	DHS	1.3	24.6	2001	DHS	23.9	74.4	
Burkina Faso	2003	DHS	1.1	28.1	2003	DHS	32.3	83.9	
Cape Verde	1990	Census	1.1	14.7	1990	Census	6.7	32.3	
Gambia	1993	Census	1.7	12.4	1993	Census	38.8	74.8	
Ghana	2003	DHS	1.0	24.2	2003	DHS	13.7	57.9	
Guinea	1999	Survey	2.4	19.7	1999	Survey	46.1	84.6	
Liberia	..	..	..	..	1986	DHS	36.0	75.3
Mali	2001	DHS	6.2	26.8	2001	DHS	48.6	88.0	

Mauritania	2001	DHS	0.5	8.1	2001	DHS	27.8	60.4
Niger	1998	DHS	4.2	41.8	1998	DHS	61.9	88.9
Nigeria	2003	DHS	1.1	15.3	2003	DHS	33.3	63.9
Senegal	..	..	..	..	1997	DHS	29.0	62.8
Sierra Leone	1992	DSMS	6.0	20.3	1992	DSMS	47.4	73.1
Togo	1998	DHS	2.4	18.3	1998	DHS	19.9	63.4
Eastern Asia								
China	2000	Census	0.3	21.4	2000	Census	1.2	42.5
China, Hong Kong SAR	1996	Census	0.8	6.0	1996	Census	1.7	14.7
China, Macao SAR	1991	Census	0.8	9.9	1991	Census	2.3	22.3
Democratic People's Republic of Korea	..	..	..	..	..	..	..	..
Japan	2000	Census	0.5	7.1	2000	Census	0.9	12.1
Mongolia	2000	Census	1.3	29.3	2000	Census	5.6	48.3
Republic of Korea	2000	Census	0.3	2.5	2000	Census	0.7	10.9
South-central Asia								
Bangladesh	..	..	..	..	2004	DHS	47.9	84.8
Bhutan	1990	Survey	7.9	45.5	1990	Survey	26.6	69.9
India	1998	NFHS	4.1	32.8	1998	NFHS	30.0	78.0
Iran (Islamic Republic of)	1996	Census	2.6	27.4	1996	Census	17.9	60.5
Kazakhstan	1999	Census	1.4	25.9	1999	Census	7.4	52.7
Kyrgyzstan	1999	Census	1.2	28.4	1999	Census	11.5	65.9
Maldives	2000	Census	1.3	25.0	2000	Census	12.0	64.1
Nepal	2001	DHS	11.3	56.5	2001	DHS	40.3	82.9
Pakistan	2001	Survey	2.8	24.2	2001	Survey	14.1	58.5
Sri Lanka	..	..	..	..	1993	DHS	7.1	38.8
Tajikistan	1989	Census	1.3	44.1	1989	Census	11.6	76.9
Turkmenistan	..	..	..	..	2000	DHS	5.9	47.3
Uzbekistan	..	..	..	..	1996	DHS	13.0	77.2
South-eastern Asia								
Brunei Darussalam	1991	Census	1.2	18.6	1991	Census	8.0	38.2
Cambodia	..	..	..	..	2000	DHS	12.9	55.5
Indonesia	..	..	..	..	2003	DHS	14.6	58.8
Malaysia	2000	Census	1.1	11.7	2000	Census	4.9	31.5
Myanmar	1991	PCFS	3.3	30.1	1991	PCFS	10.7	44.0
Philippines	2003	DHS	2.4	27.0	2003	DHS	9.4	51.3
Singapore	2000	Census	0.1	4.8	2000	Census	1.0	16.2
Thailand	2000	Census	3.4	22.4	2000	Census	11.2	44.0
Viet Nam	..	..	..	..	2002	DHS	4.2	47.8
Western Asia								
Armenia	2001	Census	0.8	17.0	2001	Census	7.9	48.9
Azerbaijan	1999	Census	2.5	16.8	1999	Census	12.8	49.0
Bahrain	2001	Census	0.3	13.5	2001	Census	4.2	34.9
Cyprus	2001	Census	0.7	10.2	2001	Census	2.8	29.9
Georgia	..	..	..	..	1999	Census	15.8	52.5
Iraq	1997	Census	2.2	16.7	1997	Census	11.6	39.7
Israel	2003	Estimate	0.2	9.7	2003	Estimate	2.7	28.6
Jordan	..	..	..	..	2002	DHS	6.2	34.1
Kuwait	1996	Estimate	1.3	22.0	1996	Estimate	13.2	47.8

Occupied Palestinian Territory	2000	Estimate	0.6	16.7	2000	Estimate	13.4	50.8
Oman	1995	FHS	1.3	22.4	1995	FHS	15.5	61.3
Qatar	2004	Census	2.3	25.2	2004	Census	3.6	37.6
Saudi Arabia	1999	Estimate	0.3	9.4	1999	Estimate	5.9	34.1
Turkey	2001	Census	2.2	20.9	2001	Census	12.9	53.0
United Arab Emirates	1987	AHS	2.5	26.6	1987	AHS	18.5	52.2
Yemen	..	..	..	..	1997	MCH	26.9	72.8
Caribbean								
Bahamas	1990	Census	0.9	13.7	1990	Census	3.7	25.2
Barbados	1990	Census	0.2	2.3	1990	Census	0.6	6.7
Dominican Republic	2002	Census	4.6	30.3	2002	Census	24.6	57.4
Guadeloupe	1999	Census	0.2	1.6	1999	Census	0.8	7.1
Haiti	..	..	..	..	2000	DHS	19.4	57.3
Jamaica	2001	Census	0.2	2.7	2001	Census	0.5	7.0
Martinique	1999	Census	0.1	0.9	1999	Census	0.4	3.9
Neatherlands Antilles	2001	Census	0.2	4.6	2001	Census	0.8	12.3
Saint Lucia	2001	Census	1.3	16.2	2001	Census	6.8	37.8
Saint Vincent and the Grenadines	2002	Estimate	4.5	26.0	2002	Estimate	16.7	48.8
Trinidad and Tobago	1990	Census	1.2	10.6	1990	Census	9.0	27.5
United States Virgin Islands	1995	Estimate	4.0	5.5	1995	Estimate	3.2	15.5
Central America								
Belize	1991	Census	1.4	18.1	1991	Census	7.9	30.9
Costa Rica	2003	Estimate	3.2	23.3	2003	Estimate	11.5	44.4
El Salvador	2000	Census	4.5	34.5	2000	Census	15.9	49.9
Guatemala	..	..	..	..	1998	DHS	26.0	69.5
Honduras	..	..	..	..	1996	NEFHS	30.5	68.3
Mexico	2000	Census	5.9	37.8	2000	Census	17.1	52.3
Nicaragua	..	..	..	..	2001	DHS	30.4	69.3
Panama	2000	Census	4.8	32.9	2000	Census	22.0	57.6
South America								
Argentina	1991	Census	2.7	25.6	1991	Census	12.4	45.2
Bolivia	2003	DHS	4.0	41.1	2003	DHS	12.4	58.1
Brazil	2000	Census	3.6	30.1	2000	Census	16.6	49.8
Chile	1992	Census	5.3	25.4	1992	Census	11.7	43.8
Colombia	..	..	..	..	2005	DHS	17.2	53.0
Ecuador	2001	Census	7.0	38.0	2001	Census	22.0	57.0
French Guiana	1999	Census	0.0	1.4	1999	Census	0.8	6.5
Guyana	1991	Census	0.9	12.1	1991	Census	6.9	26.6
Paraguay	2002	Census	2.0	22.3	2002	Census	12.0	44.8
Peru	..	..	..	..	2000	DHS	11.3	47.1
Uruguay	1996	Census	3.5	26.9	1996	Census	12.8	44.8
Venezuela	2001	Census	5.1	30.7	2001	Census	17.1	48.6

Source: UNPD 2006 CD

Table 4. Median Age at First Sexual Intercourse by Cohort: Selected Countries

	Year	Source	Cohort		Percentage Change
			Current	Older	
Eastern Africa					
Burundi	1987	DHS	na	na	19.4
Comoros	1996	DHS	<	<	17.4
Eritrea	2002	DHS	18.3	18.3	16.4
Ethiopia	2005	DHS	18.2	16.4	15.7
Kenya	2003	DHS	18.1	18.0	16.9
Madagascar	2004	DHS	17.3	17.4	17.5
Malawi	2004	DHS	17.4	17.5	17.6
Mozambique	2003	DHS	16.0	16.0	16.6
Rwanda	2005	DHS	<	20.6	20.1
Uganda	2006	DHS	16.9	16.3	16.3
Tanzania	2004	DHS	17.1	17.3	16.6
Zambia	2002	DHS	17.0	17.0	16.5
Zimbabwe	2006	DHS	18.8	18.9	18.0
Middle Africa					
Benin	2001	DHS	17.2	17.4	17.3
Cameroon	2004	DHS	16.7	16.5	16.3
Chad	2004	DHS	15.9	15.8	15.8
Congo (Brazzaville)	2005	DHS	16.2	15.9	15.8
CAR	1995	DHS	na	16.0	15.8
Gabon	2000	DHS	16.2	16.3	15.8
Southern Africa					
Botswana	1988	DHS	na	na	17.6
Lesotho	2004	DHS	18.7	18.7	18.4
Namibia	2000	DHS	18.2	18.8	20.3
South Africa	1998	DHS	na	17.8	18.7
Western Africa					
Burkina Faso	2003	DHS	17.5	17.4	17.7
Cote d'Ivoire	1999	DHS	na	16.2	16.0
Ghana	2003	DHS	18.4	18.3	18.4
Guinea	2005	DHS	16.4	15.9	16.0
Liberia	1986	DHS	na	na	15.5
Mali	2001	DHS	15.9	15.9	15.9
Mauritania	2001	DHS	<	19.0	16.0
Niger	2006	DHS	15.8	15.6	15.7
Nigeria	2003	DHS	17.6	17.3	15.5
Senegal	2005	DHS	19.6	18.7	17.6
Togo	1998	DHS	na	17.2	17.6
South-central Asia					
Kazakhstan	1999	DHS	na	20.0	21.0
Kyrgyz Republic	1997	DHS	na	19.5	20.3
Nepal	2006	DHS	18.0	17.4	16.5
Turkmenistan	2000	DHS	<	22.0	20.2
Uzbekistan	1996	DHS	na	19.7	19.7
South-eastern Asia					
Cambodia	2005	DHS	<	20.3	20.5
Indonesia	2003	DHS	<	23.8	18.4

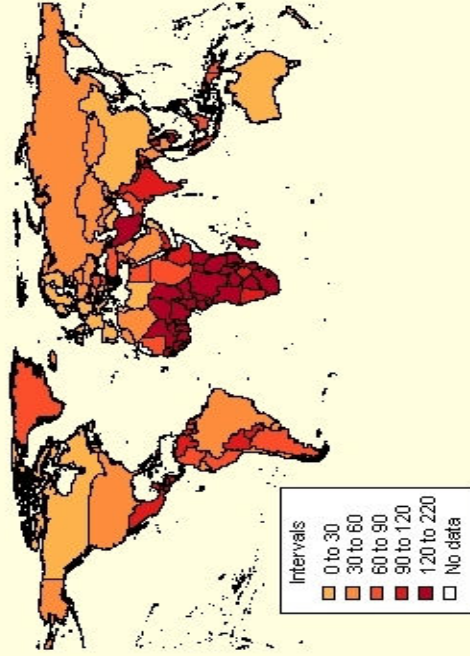
Philippines	2003	DHS	<	22.1	21.7	-0.02
Thailand	1987	DHS	na	na	23.8	
Western Asia						
Armenia	2005	DHS	<	19.8	21.4	0.07
Azerbaijan	2001	CDC	22.3	21.5	22.6	0.05
Western Europe						
Belgium	1992	FFS	na	na	19.6	
France	1994	FFS	na	18.4	18.6	0.01
Germany	1992	FFS	na	na	na	
Italy	1996	FFS	na	21.7	20.4	-0.06
Switzerland	1995	FFS	na	18.6	19.4	0.04
Northern and Eastern Europe						
Estonia	1994	FFS	na	18.4	19.6	0.06
Latvia	1995	FFS	na	18.5	20.4	0.09
Lithuania	1995	FFS	na	19.5	21.4	0.09
Norway (3)	1989	FFS	na	17.1	18.9	0.10
Bulgaria	1998	FFS	na	18.7	19.9	0.06
Czech Republic	1997	FFS	na	17.8	18.4	0.03
Hungary	1993	FFS	na	18.2	19.0	0.04
Poland	1991	FFS	na	na	20.7	
Moldova Republic	2005	DHS	19.6	19.5	20.6	0.05
Southern Europe						
Greece	1999	FFS	na	19.0	19.8	0.04
Portugal	1997	FFS	na	19.8	20.6	0.04
Slovenia	1995	FFS	na	18.1	18.9	0.04
Spain	1995	FFS	na	20.1	22.4	0.10
Caribbean & Central America						
Dominican Republic	2002	DHS	18.2	18.2	18.2	0.00
Haiti	2005	DHS	17.7	18.0	18.7	0.04
Trinidad and Tobago	1987	DHS	na	na	19.3	
El Salvador	1985	DHS	na	na	19.0	
Guatemala	1999	DHS	na	19.0	18.4	-0.03
Honduras	2005	DHS	18.4	18.1	18.2	0.01
Mexico	1987	DHS	na	na	19.1	
Nicaragua	2001	DHS	18.1	17.8	18.2	0.02
South America						
Bolivia	2003	DHS	18.7	18.7	19.0	0.02
Brazil	1996	DHS	na	18.7	19.9	0.06
Colombia	2005	DHS	17.8	18.3	18.8	0.03
Ecuador	1987	DHS	na	na	19.1	
Paraguay	1990	DHS	na	na	20.0	
Peru	2000	DHS	19.6	19.3	19.0	-0.02

Notes: If sign < is shown for the youngest age groups, it means that less than 50 percent of the respondents in age group x to x+4 have had sexual intercourse by age x;
(1) In FFS, information on median age at first intercourse is not available for Austria 1995-96, Canada 1995, Denmark 1994, Finland 1989-90, Germany 1992, the
(2) In DHS, information on median age at first intercourse is not available for Niger 2006, Ondo State 1986, Sudan 1990, Egypt 2005, Jordan 2002, Morocco 2003-2004,
(3) In the FFS for Norway, younger cohort refers to 1960 cohort and older cohort refers to 1945 cohort. In Zambia, GPS dataset is incomplete

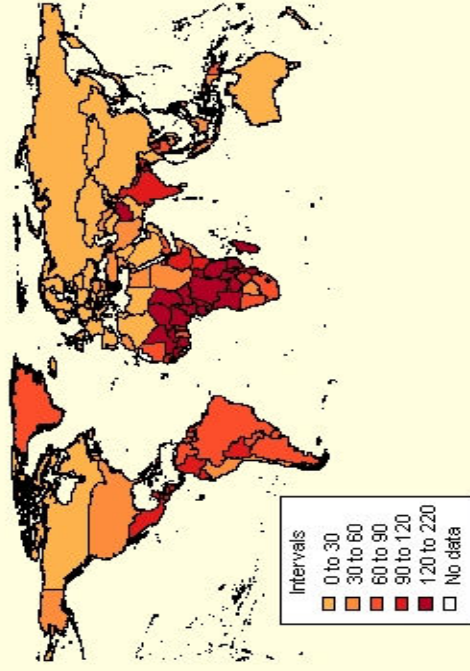
Table 5. Total Fertility Rate and Adolescent Fertility Rate by country and ranking classification

	TFR	AFR	TFR	AFR	TFR	AFR	TFR	AFR	TFR	AFR
Armenia	1	2	2	1	Belize	3	4	Afghanistan	4	4
Aruba	1	2	2	1	Bhutan	3	2	Am. Samoa	4	3
Austria	1	1	2	3	Bolivia	3	4	Angola	4	3
Barbados	1	3	2	1	Botswana	3	3	Antigua & Ber.	4	4
Belarus	1	2	2	2	Cambodia	3	3	Benin	4	4
Belgium	1	1	2	3	Cape Verde	3	4	Burkina Faso	4	4
Bermuda	1	3	2	2	Colombia	3	4	Burundi	4	2
Bosnia & Herz.	1	1	2	3	Cook Islands	3	3	Cameroon	4	4
Bulgaria	1	3	2	4	Dominican Republic	3	4	Central African	4	4
Canada	1	1	2	2	Ecuador	3	4	Chad	4	4
Channel Islands	1	1	2	3	Egypt	3	2	Comoros	4	3
China, Hong Kong	1	1	2	3	Fiji	3	2	Congo	4	4
China, Macao	1	1	2	1	French Guiana	3	4	Cote d'Ivoire	4	4
China3	1	1	2	1	Gabon	3	4	Congo	4	4
Croatia	1	1	2	4	Guam	3	3	Djibouti	4	2
Cuba	1	3	2	1	Haiti	3	3	Equatorial Guinea	4	4
Cyprus	1	1	2	3	Honduras	3	4	Eritrea	4	3
Czech Republic	1	1	2	3	India	3	3	Ethiopia	4	4
Estonia	1	2	2	3	Israel	3	1	Gambia	4	4
Finland	1	1	2	2	Jamaica	3	4	Ghana	4	3
Georgia	1	3	2	3	Jordan	3	2	Guatemala	4	4
Germany	1	1	2	1	Kiribati	3	2	Guinea	4	4
Greece	1	1	2	3	Kyrgyzstan	3	2	Guinea-Bissau	4	4
Hungary	1	2	2	2	Lao People's Democratic	3	2	Iraq	4	4
Italy	1	1	2	1	Lesotho	3	4	Kenya	4	4
Japan	1	1	2	2	Libyan Arab Jamahiriya	3	1	Liberia	4	4
Latvia	1	1	2	1	Malaysia	3	1	Madagascar	4	4
Liechtenstein	1	1	2	1	Mayotte	3	3	Malawi	4	4
Lithuania	1	2	2	1	Micronesia	3	2	Mali	4	4
Luxembourg	1	1	2	2	Namibia	3	4	Marshall Islands	4	4
Malta	1	1	2	3	Nauru	3	4	Mauritania	4	4
Mauritius	1	3	2	1	Nepal	3	4	Mozambique	4	4
Montenegro	1	1	2	2	Nicaragua	3	4	Niger	4	4
Netherlands	1	1	2	2	Niue	3	2	Nigeria	4	4
Nort. Mariana Isl.	1	3	2	2	Oman	3	1	Occupied Palestinian	4	4
Poland	1	1	2	2	Panama	3	4	Pakistan	4	3
Portugal	1	1	2	2	Paraguay	3	3	Papua New Guinea	4	3
Puerto Rico	1	3	2	1	Peru	3	3	Rwanda	4	2
Republic of Korea	1	1	2	2	Philippines	3	3	Samoa	4	2
Republic of Moldova	1	2	2	3	Gata	3	1	Senegal	4	4
Romania	1	2	2	3	Reunion	3	2	Sierra Leone	4	4
Russian Federation	1	1	2	4	Saudi Arabia	3	2	Solomon Islands	4	3
San Marino	1	1	2	2	South Africa	3	3	Somalia	4	3
Serbia	1	2	2	1	Suriname	3	3	Sudan	4	3
Singapore	1	1	2	1	Swaziland	3	4	Sao Tome and	4	3

Adolescent Birth Rates around Mid-1980s



Adolescent Birth Rates around Mid-2000s



Annual change in Adolescent Birth Rates

