

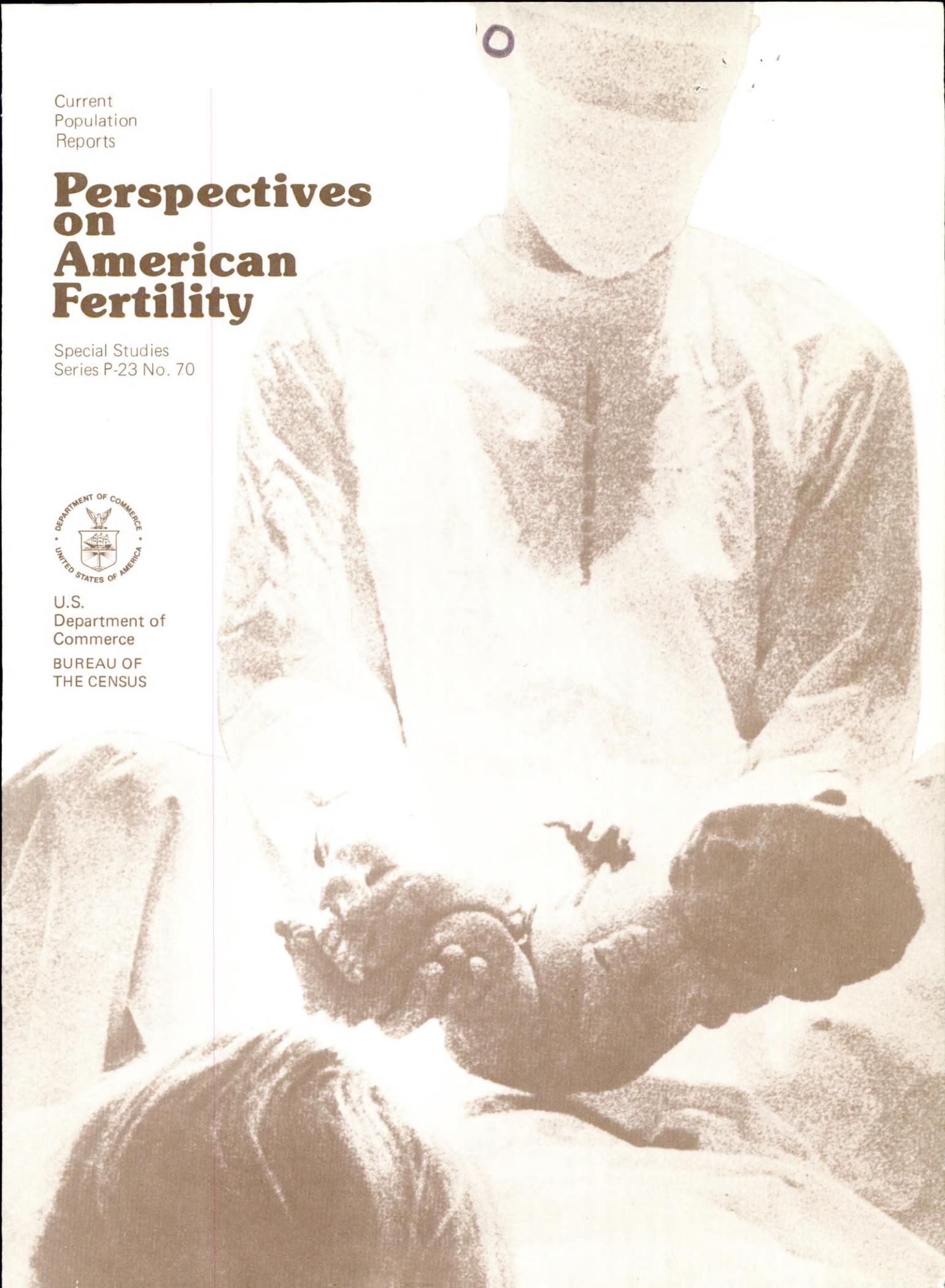
Current  
Population  
Reports

# Perspectives on American Fertility

Special Studies  
Series P-23 No. 70



U.S.  
Department of  
Commerce  
BUREAU OF  
THE CENSUS



Current  
Population  
Reports

# **Perspectives on American Fertility**

by  
**Maurice J. Moore**  
**Martin O'Connell**

Special Studies  
Series P-23 No. 70  
Issued July 1978

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**Library of Congress Cataloging in Publication Data**

Moore, Maurice J  
Perspectives on American fertility.

(Current population reports: Special studies: Series  
P-23; no. 70)

1. Fertility, Human—United States. 2. United  
States—Statistics, Vital. I. O'Connell, Martin, joint  
author. II. Title. III. Series: United States.

Bureau of the Census. Current population reports:  
Special studies: Series P-23; no. 70.

HA203.A218 no. 70 [HB915] 312'.0973s [301.32'1'0973]  
78-16550

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## Preface

# Perspectives on American Fertility

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In 1975, slightly less than 11 percent of the U.S. population was 65 years of age and over; 50 years later, in 2025, persons of that age may account for as much as 17 to 20 percent of the population. The fact that the percentage of the population in this age group may come close to doubling in the 50 years from 1975 to 2025 will be due to a phenomenon which has already occurred—a 20-year “baby boom” preceded and followed by periods of very low fertility.

The inevitable fluctuation in population distribution among the elderly in the United States will simply be the last chapter in a story that will have been continuing for the lifetime of a generation. Baby boom children inundated the Nation’s maternity wards for almost 20 years after World War II. They went on to overwhelm the capacities of elementary and secondary school systems and are continuing to swell the college age population of today. Businesses have thrived on catering to the needs and demands of what has proved to be a very vocal and relatively affluent segment of society. Most recently, the American economy has been straining to incorporate into the work force the great surge of young persons leaving school and seeking their first full-time positions.

Short-lived demographic events clearly have a way of living on! And the demographic event which has dominated the last quarter century and which will continue to affect the social and economic structure of the United States is a fertility event.

From the perspective of the human lives affected now and into the foreseeable future, the phenomena of early marriage and frequent childbearing which occurred after World War II are of crucial significance. From the longer time perspective, however, the baby boom represents a relatively brief period of only 15 to 20 years in the midst of almost 200 years of declining American fertility. From this latter point of view, the continuing decline in fertility rates in the 1970’s takes up about where the long-term decline left off in the mid-1930’s. In the present period of subreplacement fertility, population experts are often asked why couples are having so few children. Perhaps, the more interesting question is, why did they have so many 20 years ago?

The purpose of this report is to collect and analyze statistical information relating to the childbearing experience and prospects of American women. The main emphasis is on the most recent data available at the time of writing; however, the discussion of current levels and trends in fertility are illuminated, where possible, with similar measures from varying periods in the past. The report may serve as a reference document for experts in demography and population studies. Its principal audience, however, is thought of as persons interested in the course and present status of childbearing in the United States but who are not already familiar with the principal data sources and the substance of the information they contain. With very few exceptions, all of the information in this report has been published previously by the Bureau of the Census, the National Center for Health Statistics, the Center for Disease Control, or in various professional journals and books.

The predecessor of this report, “Fertility Indicators: 1970,” was published by the Bureau of the Census in April 1971. The impetus to update that report comes from two sources. First, there has been a substantial decline in fertility since 1970. Each year from 1972 through 1976, a new record low has been posted for

the Nation's total fertility rate, with rates now being well below those needed for long-run replacement of the population. Various other demographic phenomena have been associated with this decline in fertility, such as increasing percentages of single persons in their twenties and longer intervals between marriage and childbirth. Secondly, important new data sources have become available, such as the Census Bureau's studies of birth expectations and special studies of marital and fertility histories, the 1965 and 1970 National Fertility Surveys, and the 1973 National Survey of Family Growth. Data from all these sources have been incorporated in this report to provide current information on various aspects of the childbearing process and some still-evolving trends in fertility.

The authors of this report were assisted in the work of compiling and checking data by **Peggy Payne** and **Carol Smith**; the latter also assisted in the typing of various drafts of the manuscript. Helpful review and suggestions were provided by **Arthur A. Campbell** of the National Institute of Child Health and Human Development, **Robert L. Heuser** and **William F. Pratt** of the National Center for Health Statistics, and **Paul C. Glick**, **Charles E. Johnson, Jr.**, and **Karen M. Mills** of the Population Division, U.S. Bureau of the Census. Text and tables were edited by **Paula Coupe** and **Helen Bonkoski**, and graphic assistance was provided by **David Coontz**, Publications Services Division.

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## Symbols Used in Tables

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–	Represents zero or rounds to zero.
B	Base is too small to show derived measure.
NA	Not available.
NR	Not reported.
...	Not applicable.

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## Chapter 1.

# Historical Trends

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### Trends in the Birth Rate Since the 19th Century

The sustained decline in the birth rate from the earliest period in our Nation's history to the Great Depression of the 1930's is the dominant characteristic of the course of fertility in the United States. Although no data exist on fertility for the United States as a whole in the early part of the 19th century, the utilization of some fragmentary data and demographic techniques suggests that the crude birth rate (the number of live births per 1,000 population in a given year) may have been about 50 in 1800<sup>1</sup> as compared with the current rate of about 15. Thus, at the beginning of the 19th century, fertility in the United States was probably higher than in any western European country at that time.

Although, the birth rate had fallen to approximately 45 by the 1850's, it was still considerably higher than the rate in most contemporary European nations. It was not until the late 1800's that the birth rate for the White population in the United States fell to levels comparable with those recorded in western Europe (table 1-1).

The unusually high birth rates for the United States as a young Nation can partially be explained by the sensitivity of the crude birth rate to the numbers of births recorded each year and the proportion of women in the childbearing years. As a Nation with a youthful age structure and a growing population that was continuously rejuvenated by young immigrants, the United States had an unusually high birth rate. For example, the crude birth rate for the White population of the United States for the 1871-75 period was 37.1, 21 percent higher than the rate of 30.7 for Sweden. However, a different picture emerges when the total fertility rates, which are unaffected

by differences in the age distributions, are compared for the two populations. (The total fertility rate for a given year shows how many births a group of 1,000 women would have by the end of their childbearing period, if, during their entire reproductive period, they were to experience the age-specific birth rates for that given year.) The total fertility rate for the 1871-75 period was 4,490 per 1,000 women for Sweden and 4,560 per 1,000 women for the United States, a difference of less than 2 percent.<sup>2</sup>

During the 20th century, fertility patterns in the United States paralleled those of many European countries. Extremely low birth rates were recorded during the Great Depression, even though modern day contraceptives, such as the birth control pill and the intrauterine device (IUD), were not yet in use. After World War II, sharp increases occurred in annual birth rates, with the resultant baby boom continuing for many more years in the United States than in the majority of western European countries. Beginning in the late 1950's, the decline in fertility resumed in the United States and has continued to its present low level.

### Contribution of the Birth Rate to Population Growth

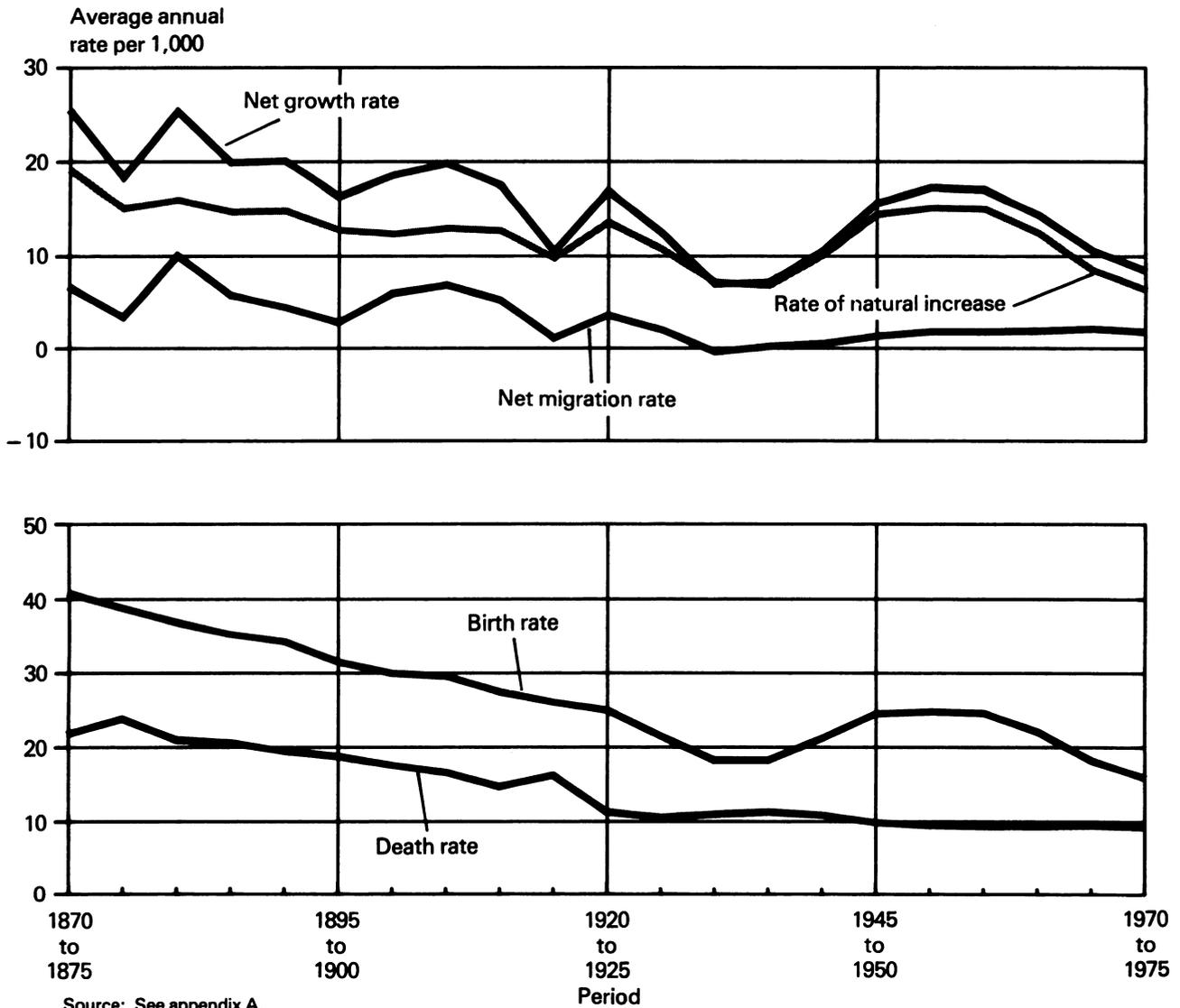
Trends in the three components of population growth, births, deaths, and net migration are shown in figure 1-1. The birth rate, as a component of population growth, has varied in importance in the determination of overall population trends in different periods of our Nation's history. For the 50 years between the Civil War and World War I, changes in the birth and death rates generally paralleled each other, producing a rather smooth, declining rate of natural increase (birth rate minus death rate) during this period. As a result, the net growth rate (natural increase plus net migration) was

---

<sup>1</sup> See Ansley Coale and Melvin Zelnic, *New Estimates of Fertility and Population in the United States* (Princeton: Princeton University Press, 1963) and Richard A. Easterlin, "The American Population," in Lance E. Davis, Richard A. Easterlin, and William N. Parker, eds., *American Economic Growth: An Economist's History of the United States* (New York: Harper and Row, 1972), pp. 121-183.

<sup>2</sup> The total fertility rate for the United States is from Coale and Zelnic, *op. cit.*, p. 36. The rate for Sweden is from Gustav Sundbarg, *Population in Sweden 1750-1900* (Stockholm: National Central Bureau of Statistics, 1970), table 43.

**FIGURE 1-1**  
**Components of Population Change: 1870-75 to 1970-75**



heavily influenced by changes in the rate of net migration rather than by birth or death rates during the late 1800's and early 1900's.

Low net migration rates, combined with the influenza epidemic of 1918, resulted in a net growth rate of 10.5 per 1,000 population for the 1915-20 period, the lowest rate of population growth recorded until the Great Depression when the net growth rate fell to 7 per 1,000 population during the 1930-35 period. The Immigration Act of 1924, which established immigration quotas based on national origin, substantially reduced the number of immigrants to about 1 per 1,000 population per year. The fairly constant net migration rate and death rate since the 1920's have made the birth rate the primary factor in the determination of population growth patterns for the last 50 years.

Increases in the birth rate contributed to the doubling of the net rate of population growth between the 1930-35 and 1945-50 periods from 7.0 to 15.6 per 1,000. However, a

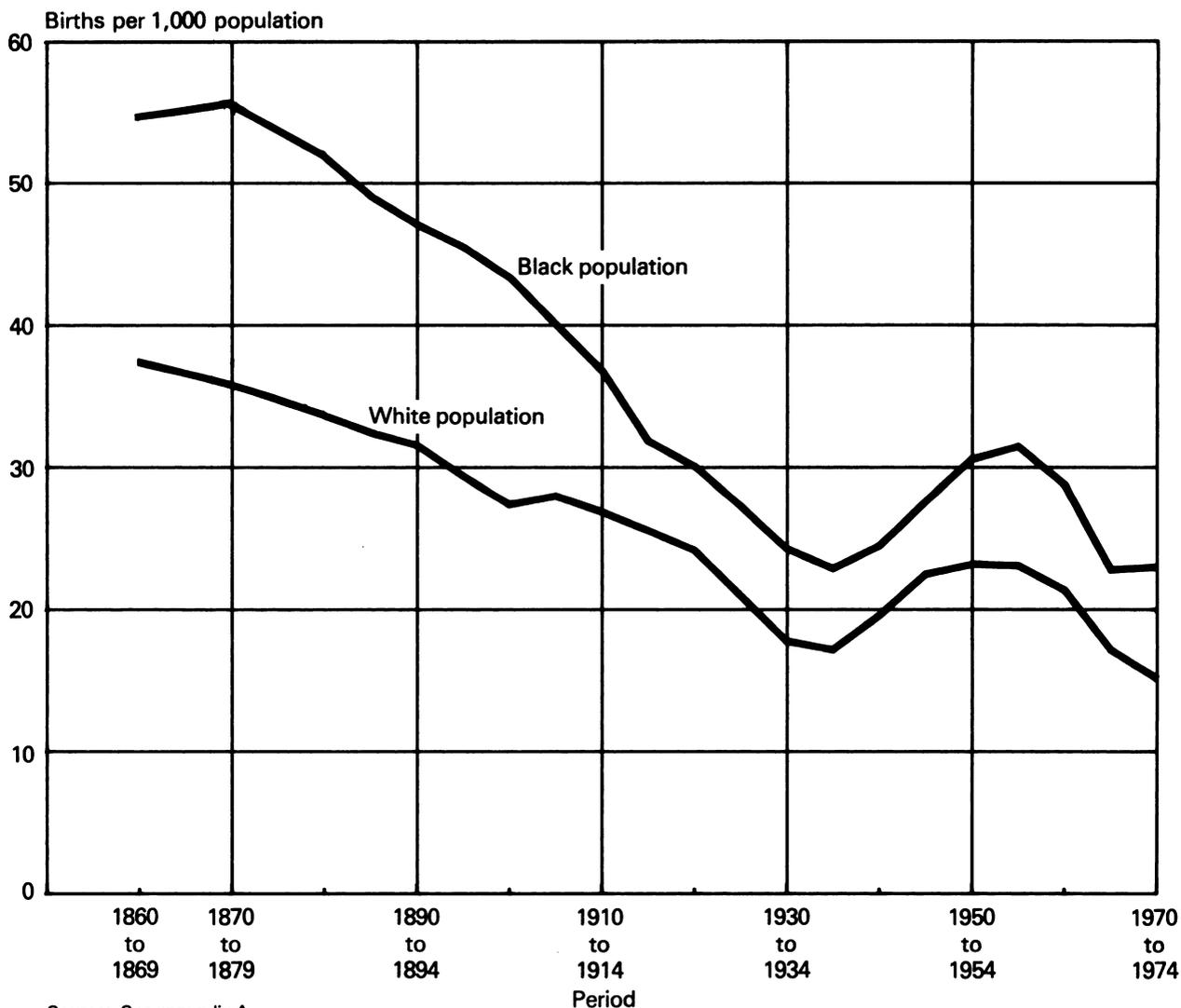
decline occurred in the net annual growth rate from 1.7 percent in the 1950-55 period to less than 1 percent in the 1970-75 period. This decline was almost entirely due to corresponding declines in the crude birth rate (from 24.8 to 15.9 per 1,000). If the rate of population growth during the early 1950's had been maintained, the population of the United States would have doubled in approximately 40 years. However, by the 1970-75 period, very large declines in fertility increased the doubling period to approximately 80 years.

### Fertility Trends by Race

While accurate estimates of the fertility of the Black population were not available from either census or vital statistics records until the early part of the 20th century, demographers have estimated the crude birth rate for the Black population to have been between 50 and 60 births per

FIGURE 1-2

**Crude Birth Rate of the White and Black Population: 10-Year Averages, 1860-69 and 1870-79 and 5-Year Averages, 1880-84 to 1970-74**



Source: See appendix A.

1,000 by the mid 1800's (figure 1-2). In comparison, the White population was estimated to have a crude birth rate of around 45 per 1,000 at the same time. Even though evidence suggests that the fertility of the White population continuously declined throughout the 1800's,<sup>3</sup> there is little to suggest a similar decline at such an early period for the Black population.

Although the level of the Black birth rate has always been higher than that of the White birth rate, fertility differences by race have narrowed considerably over time. Demographers place the start of the Black fertility decline during the latter half of the 19th century and suggest that the movement of the Black population after the Civil War from rural and farm areas to more urbanized areas was a primary factor in the

reduction of the Black birth rate. In the 1880-84 period, the Black crude birth rate was around 52 per 1,000 as compared with the White rate of 34 per 1,000 (figure 1-2). By the 1920-24 period (table 1-2), the difference between the two rates narrowed to only 8.4 per 1,000 with Blacks still having the higher birth rate.<sup>4</sup> Although the large changes in fertility

<sup>4</sup> In a few instances, birth rates for the same race in the same time period in some of the tables presented in this section may differ slightly due to the different methodological procedures used to estimate the birth rate. Data which come from the following sources adjust for underenumeration of the population and therefore produce lower fertility rates than those routinely published by the National Center for Health Statistics: Ansley Coale and Norfleet W. Rives, "A Statistical Reconstruction of the Black Population of the United States, 1880-1970: Estimates of True Numbers by Age and Sex, Birth Rates, and Total Fertility," *Population Index*, Vol. 39, No. 1 (January 1973); Coale and Zelnik, op. cit.; and Robert L. Heuser, *Fertility Tables for Birth Cohorts by Color: United States, 1917-1973* (Washington: U.S. Government Printing Office, 1976).

<sup>3</sup> Yasukichi Yasuba, *Birth Rates of the White Population in the United States, 1800-1860* (Baltimore: The Johns Hopkins Press, 1962).

that have occurred in the past 50 years for the Black population have paralleled those of the White population, a fairly constant difference of 8 to 11 points has persisted in the crude birth rate.

A more detailed analysis of fertility trends by the age of the mother is presented in table 1-3. For both White and Black women, a noticeable concentration of childbearing among those 20 to 29 years old has occurred in the past 50 years. Fertility over age 29 has sharply declined for both races since the 1920's although it is apparent that these older women, especially those 30 to 34 years old, contributed toward the postwar baby boom. Among the older age groups, increases in fertility that occurred after World War II were primarily a consequence of postponements in childbearing during the Great Depression.

From a historical perspective, the postwar baby boom appears as an aberration from the long-term decline in fertility in the United States, since the low fertility rates of the early 1970's are of a magnitude comparable to those recorded during the Great Depression. However, fertility rates for women over 35 are significantly lower now than they were during the 1930's. For these women, the effective use of improved contraceptive practices has probably played a major role in the reduction of unwanted births at older ages. Partly because of the increasing use of sterilization, one can expect the fertility of these women to remain at low levels in the future.

In the decade after World War II, there was the unique situation of an economy with a large demand for labor but with a scarcity of available labor because of both the relatively small number of births recorded in the late 1920's and early 1930's and severe immigration restrictions. These factors combined to create a relatively advantageous situation for young couples entering their reproductive years. One result was early marriages and large families.<sup>5</sup>

The pattern of postponement of childbearing and the percent of childless ever-married women is shown in table 1-4. After the depression years of the 1930's, about one-third of the women who were in their twenties were childless. This percentage consistently declined between 1950 and 1960 for women of all races because not only did women have more children, but they had them at earlier ages in their marital life during that time period. After 1960, childlessness began to increase among young wives. Most dramatic is the increase in the proportion childless among young White women 20 to 24 years old (from 25 percent in 1960 to 45 percent in 1975). This increase in childlessness among young wives presumably reflects, in part, the changing attitudes of young wives toward early childbearing and the pursuit of their own educational and career goals. Whether young women of today who are postponing childbearing will eventually bear as many children as their predecessors remains to be seen. Temporary delays, however, have a tendency to become permanent postponements as a woman develops other interests that would compete with her role as a mother.

## Social and Demographic Implications of Variations in Fertility

One consequence of declining fertility is the increase in the median age of the population. A rough estimate of the median age in the United States as of the 1820 census was 17 years. By 1860, the median age had increased to 19.4 years, and by 1920 it was slightly over 25 years (table 1-5). The percentage distribution of the total population by age groups over this long period of declining fertility was characterized by a marked drop in the proportion of the population under 10 years of age.

The wide variations in fertility that have occurred since World War I have dramatically affected the age profile. Figure 1-3 presents the "population pyramids" for each census since 1920; these pyramids are bargraphs that show the percentage of the total population in different age-sex categories. In 1920, the configuration of the pyramid was very triangular as the age group under 10 years provided a rather broad base consisting of 21.8 percent of the total population. The last effects of the immigration waves of the late 19th and early 20th century can be observed in the excess of males over females in the age groups above 30 years since the majority of the immigrants to the United States were men.

The effect of the steep fertility declines between the two world wars can be seen in the 1930 and 1940 population pyramids which illustrate a continually shrinking population base of children under 10 years of age. Persons born during the depression of the 1930's, who were 9 years old and under in 1940, were then destined to occupy a unique position in the demographic history of the United States by being "sandwiched" between the larger birth cohorts of the 1920's and the subsequent baby boom cohorts of the 1940's and 1950's. This pattern is illustrated in the 1950, 1960, and 1970 population pyramids in which the depression cohort was respectively 10 to 19, 20 to 29, and 30 to 39 years old. The fertility decline that began in the late 1950's is also illustrated in figure 1-3. As shown by the 1970 population pyramid, the number of births during the 1960's (persons 9 years old and under in 1970) is less than the number occurring during the 1950's (persons 10 to 19 years old in 1970). In addition, the number of births during the 1970's (projected to be about 33 to 34 million) will be about 15 percent less than the number of births during the 1960's (about 39 million births).

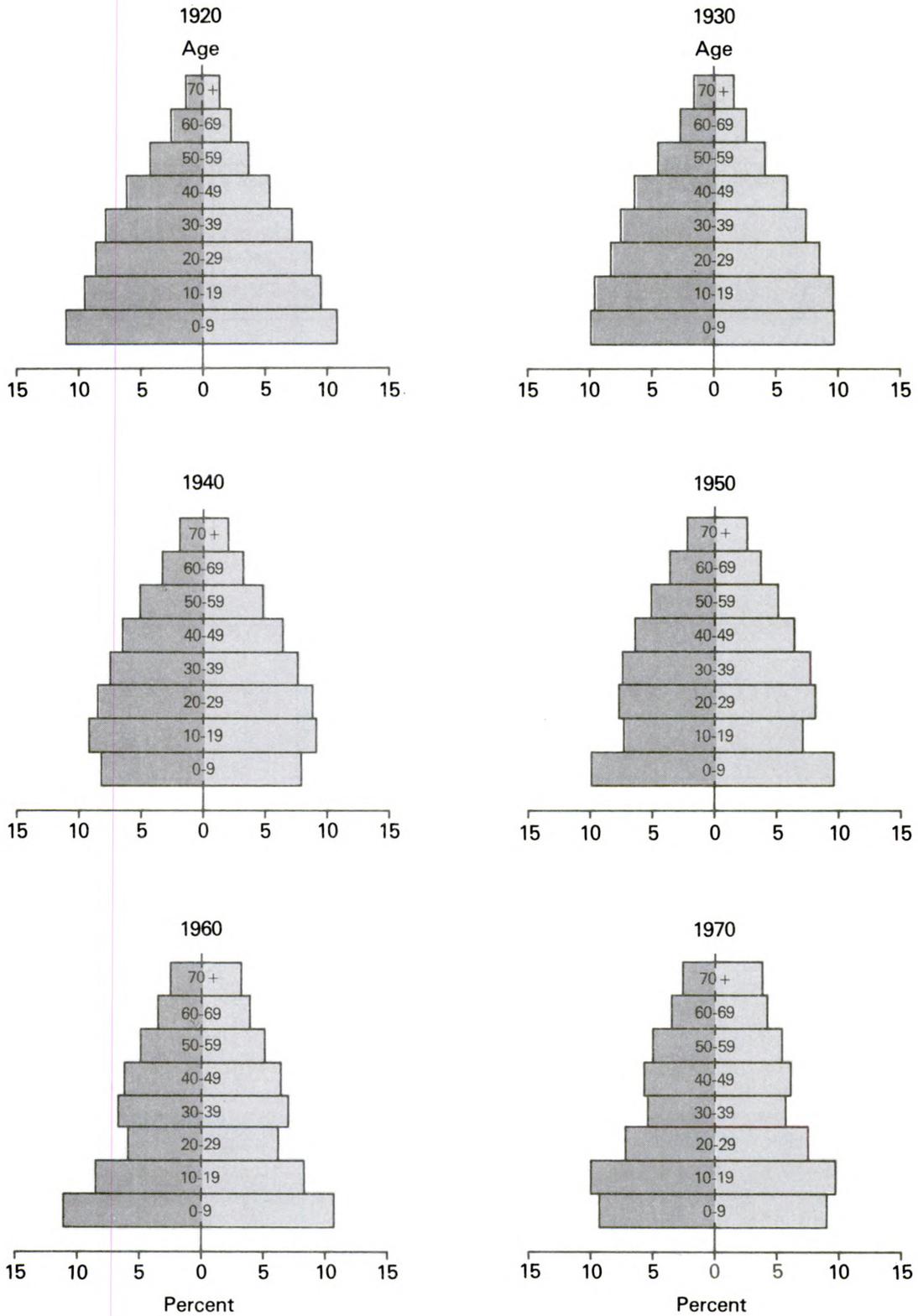
One social consequence of the wide variations in fertility that have occurred in recent years is felt today in the imbalances between educational facilities, faculty, and the student population. Large numbers of college graduates who were trained as teachers in the late 1950's and early 1960's to accommodate the baby boom generations entering school are today in excess of current demands by educational institutions because of the decreasing numbers of births being recorded in the past decade. Widely fluctuating numbers of people in different age groups also make demands on health, welfare, and economic institutions to develop flexible programs to provide for varying needs for services and jobs in future time periods.

<sup>5</sup> For an explanation of the American baby boom, see Richard A. Easterlin, *Population, Labor Force, and Long Swings in Economic Growth* (New York: Columbia University Press, 1968).

FIGURE 1-3

**Percent Distribution of the Population, by Age and Sex:  
United States, 1920 to 1970**

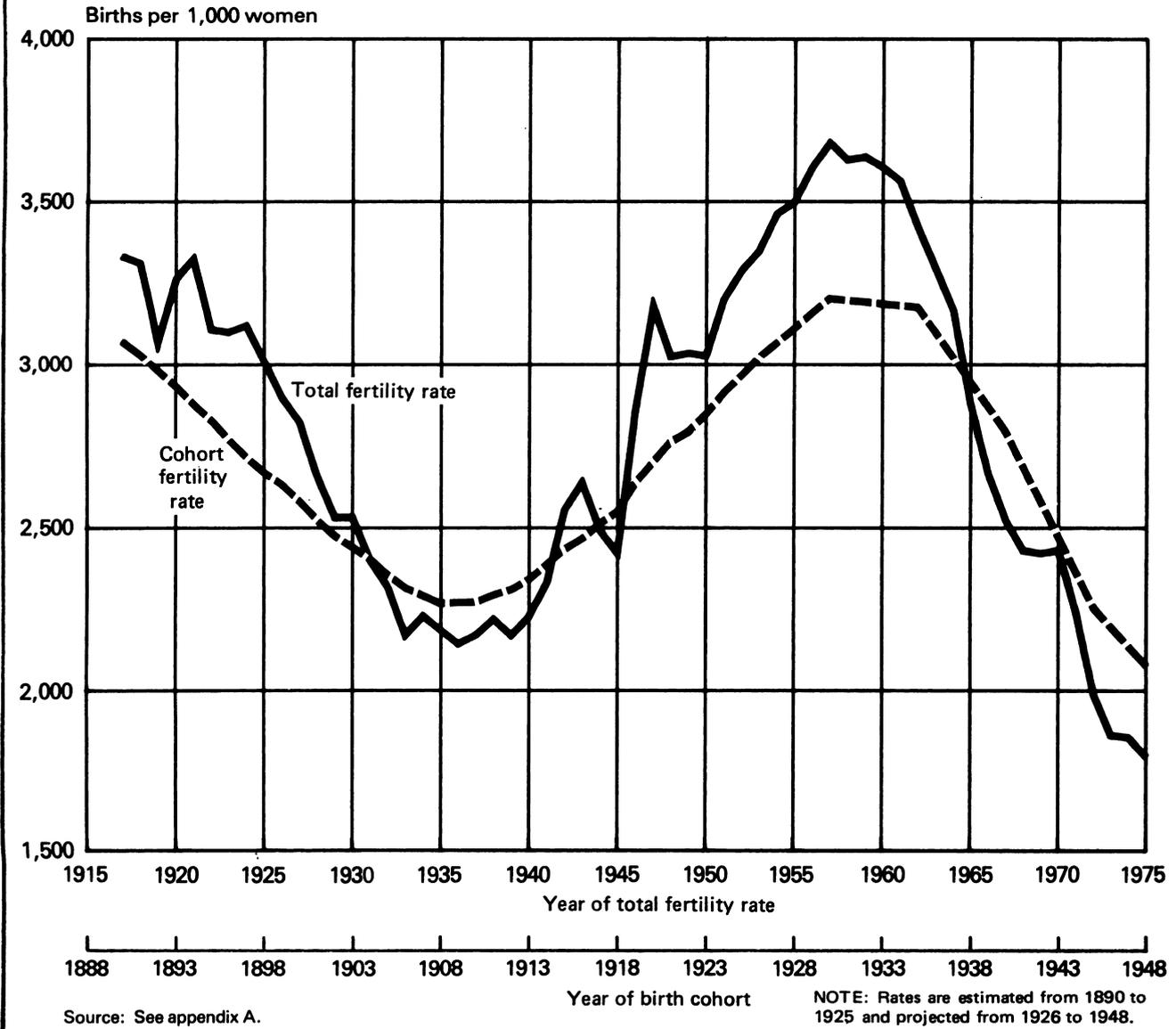
Male  
Female



Source: See appendix A.

FIGURE 1-4

**Total Fertility Rate, 1917 to 1975, and Completed Cohort Fertility Rate at Age 49: 1890 to 1948**



**Cohort Fertility**

All of the fertility statistics discussed to this point referred to the years in which the births occurred. Another way of examining the fertility patterns of American women is to focus on measures of fertility for women born in a specified time period.

Table 1-6 shows changes in the distribution of completed family size for women born from the Reconstruction period after the Civil War to just before the Great Depression. As shown in previous sections, this period in American fertility was characterized by a continuous decline in the birth rate. Taking age 49 as the end of a woman's reproductive career, a notable increase in the concentration of women bearing two or three children is shown in table 1-6, from 23 percent for the

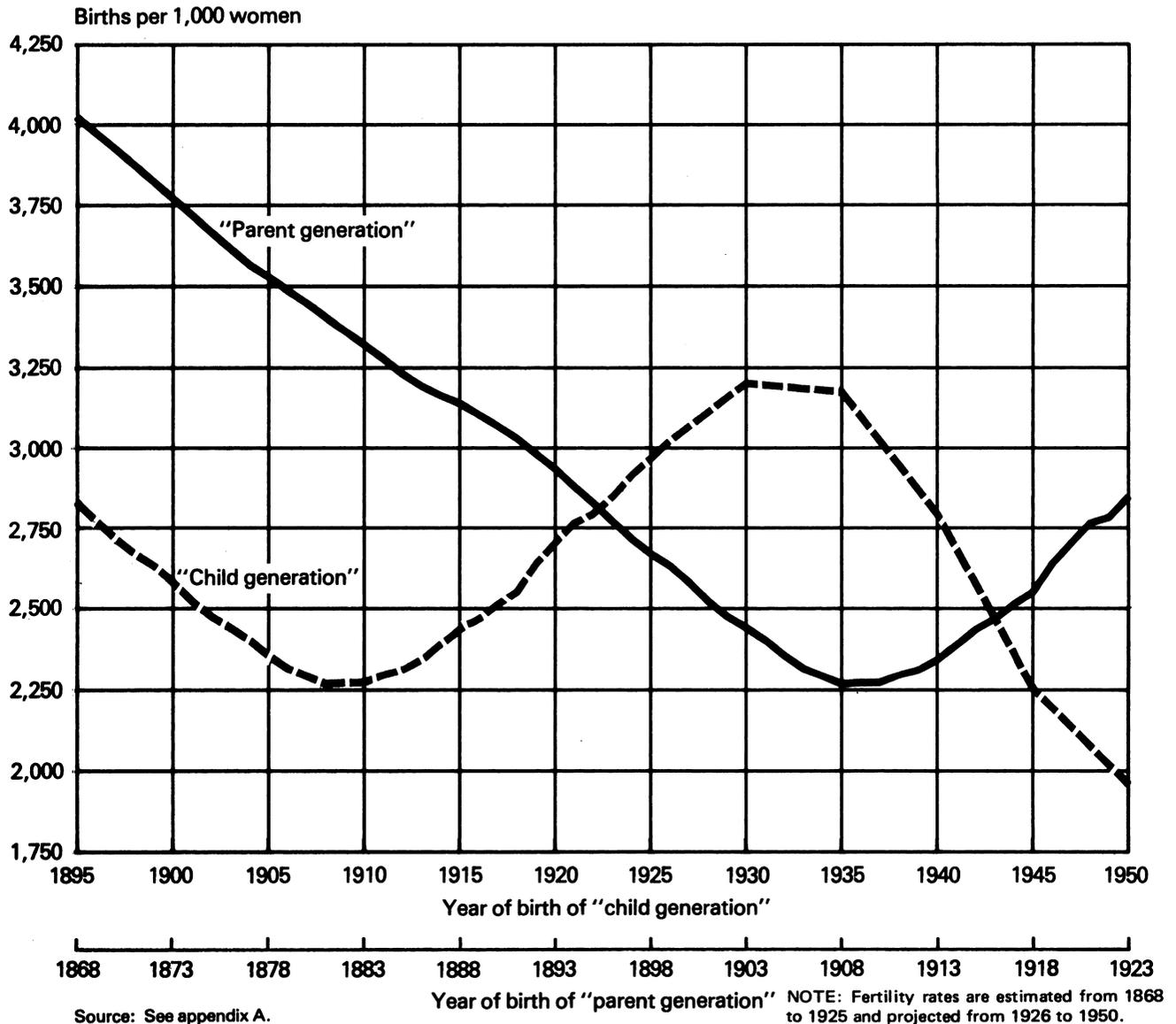
1870 birth cohort to almost 45 percent for the 1925 birth cohort.

Both the proportion of women childless and the proportion bearing five or more children have been halved since 1870, although the latter proportion has increased since 1910 as a result of the high rates of childbearing for women who have experienced a portion of their reproductive lives in the postwar baby boom. The relatively high proportion of childless women born between 1870 and 1910 may possibly be explained in part by later ages at first marriage (resulting in a shortened reproductive career) and higher proportions of women never marrying.

Although data are not yet available for more recent birth cohorts, preliminary figures for women who are currently in their early forties indicate that the birth cohorts of the

FIGURE 1-5

**Cumulative Fertility at Age 49 for "Parent Generations" Born from 1868 to 1923 and for "Child Generations" Born from 1895 to 1950**



1930's will have less than 10 percent of the cohort childless at the end of their childbearing period.<sup>6</sup>

At this point, a comparison of the total fertility rate with the completed cohort fertility rate might be helpful. As previously mentioned, the total fertility rate is an annual measure of fertility for women in the childbearing years.

The completed cohort fertility rate, however, indicates the actual number of births a woman has had at the end of her reproductive life. These two rates are charted in figure 1-4 so that the total fertility rate is superimposed on the cohort fertility rate at the point where the birth cohort has reached 27 years of age, approximately the mean age of

childbearing during the 20th century.

Even though both fertility curves exhibit the same general pattern, the variation in the total fertility rate is considerably greater than that of the cohort fertility rate. The contrast arises because the total fertility rate is more sensitive to the short-run changes in social conditions that affect fertility and produce temporary postponements in childbearing, whereas the cohort rate, which encompasses some 30 years of reproductive life, tends to reflect long-range variations in social conditions.

During the depression years, the total fertility rate was an underestimation of the true cohort fertility rate. This situation resulted from the postponement of childbearing during the depression. For women born between World War I and World War II, whose reproductive years coincided with

<sup>6</sup> See Heuser, *op. cit.*, table 8, for estimates of childlessness for more recent birth cohorts.

the baby boom, the high total fertility rates of the 1950's and early 1960's will apparently exceed the cohort fertility rates of these women.

Although women born during the postwar baby boom will not have completed their cohort fertility until the 1980's and 1990's, their current patterns of childbearing appear to be understating their expected cohort fertility as estimated by their stated birth expectations of over 2.0 children per woman.<sup>7</sup>

### Intergenerational Fertility Differences and Projected Trends

Given the sharp variations in fertility that have occurred in the past 50 years, what can be said about the comparative fertility from one generation to another? Figure 1-5 attempts to illustrate the contrasts in the completed cohort fertility at age 49 for generations of "mothers" and "daughters." Data for the cohorts of mothers are for birth cohorts of 1868 to 1923. Since the mean age of childbearing or the "length of a generation" is about 27 years, another fertility curve was plotted on the same graph 27 years later to represent the birth cohorts of daughters. All data points shown for women born after 1925 are from Census Bureau medium projections of completed cohort fertility<sup>8</sup> since actual rates of completed cohort fertility at age 49 are not yet available for the more recent birth cohorts.

The daughters of women born between 1860 and 1880 had, on the average, about one child fewer than their mothers because of the continuously declining fertility throughout the latter half of the 19th century. For example, women born in 1883 completed their reproductive lives with an

<sup>7</sup>This is the latest estimate as of 1977, see U.S. Bureau of the Census, *Current Population Reports, Series P-20, No. 316, "Fertility of American Women: June 1977 (Advance Report)."*

<sup>8</sup>U.S. Bureau of the Census, *Current Population Reports, Series P-25, No. 704, "Projections of the Population of the United States: 1977 to 2050."*

average of 3.3 children; their daughters, born around 1910, ended their childbearing period with about 2.3 children.

However, the cohorts born later into the 20th century reversed this historical trend. Women born between World War I and World War II began to experience a rise in completed cohort fertility as they participated in the baby boom. The women born in 1935 are estimated to have almost 1 child more (3.2 per woman), on the average, than their mothers (2.3 per woman) who were born in 1908.

One of the leading theories attempting to explain current intergenerational differences in American fertility relies on the economic consequences of the relative size of birth cohorts. Small birth cohorts result in a relative scarcity of workers. Thus, the members of these cohorts possess economic advantages in terms of jobs and income mobility and become, in turn, more prosperous parents with higher fertility. The reverse situation then occurs for people born during periods of high fertility and the cyclical process is set in motion. Whether this alternating cycle of high and low fertility birth cohorts will persist remains to be seen, although substantial data have already been collected pointing to a statistical relationship between the relative size of a birth cohort and the fertility of that cohort.<sup>9</sup> These variations, however, should be viewed in the context of low to moderate levels of fertility. It is highly unlikely that completed cohort fertility rates for future birth cohorts of women will ever exceed the 3.5 or 4 children per woman that was common during the latter half of the 19th century.

<sup>9</sup>See Richard A. Easterlin and Gretchen A. Condran, "A Note on the Recent Fertility Swing in Australia, Canada, England and Wales, and the United States," in Hamish Richards, ed., *Population, Factor Movements and Economic Development: Studies Presented to Brinley Thomas* (Cardiff: University of Wales Press, 1976), pp. 139-151; Ronald D. Lee, "Demographic Forecasting and the Easterlin Hypothesis," *Population and Development Review*, Vol. 2 (September/December 1976), pp. 459-468; and Martin O'Connell, "The Effect of Changing Age Distributions on Fertility: An International Comparison," in Julian L. Simon, ed., *Research in Population Economics*, Vol. 1 (Greenwich, Conn.: Johnson Associates, 1978).

TABLE 1-1

## Crude Birth Rates for Selected Countries: 5-Year Averages, 1871-75 to 1970-74

(Rates refer to boundaries at specified dates. For meaning of symbols, see page IX)

Country	1871 to 1875	1901 to 1905	1930 to 1934	1945 to 1949	1955 to 1959	1970 to 1974
United States:						
White.....	37.1	27.3	17.8	22.5	23.1	15.2
Black.....	<sup>1</sup> 55.4	<sup>2</sup> 43.4	24.3	27.6	31.5	23.0
Australia.....	37.0	26.4	17.6	23.1	22.6	20.0
Austria.....	39.3	35.7	15.1	16.7	16.8	13.9
Belgium.....	32.4	27.9	17.6	17.3	17.0	13.8
Canada.....	(NA)	(NA)	22.2	27.0	27.8	16.2
Denmark.....	30.8	29.0	17.9	21.6	16.8	14.6
England and Wales.....	35.5	28.2	15.3	18.0	15.9	14.7
Finland.....	37.0	31.3	20.0	27.0	19.9	13.1
France.....	25.5	21.2	17.2	20.3	18.4	16.5
Germany.....	38.9	34.3	16.3	<sup>3</sup> 16.9	<sup>3</sup> 16.9	<sup>3</sup> 11.6
Hungary.....	43.1	37.4	23.2	19.5	17.8	15.3
Italy.....	36.9	32.6	24.5	21.1	18.0	16.3
Japan.....	<sup>4</sup> 23.6	33.6	31.8	30.2	18.2	19.1
Norway.....	30.3	28.5	15.7	20.8	18.1	16.0
Spain.....	(NA)	35.1	27.5	22.2	21.3	19.5
Sweden.....	30.7	26.1	14.4	19.0	14.5	13.7
Switzerland.....	30.2	27.8	16.7	19.4	17.5	14.5

<sup>1</sup>1870 to 1879. <sup>3</sup>Federal Republic of Germany.<sup>2</sup>1900 to 1904. <sup>4</sup>1872 to 1876.

Source: See appendix A.

TABLE 1-2

Births, Crude Birth Rates, and Total Fertility Rates, by Race:  
5-Year Averages, 1920-24 to 1970-74, and Single-Year Data, 1965 to 1975

(Rates are live births per 1,000 women)

Year	All races			White			Black and other races		
	Births (thousands)	Crude birth rate	Total fertility rate	Births (thousands)	Crude birth rate	Total fertility rate	Births (thousands)	Crude birth rate	Total fertility rate
FIVE-YEAR AVERAGES									
1970 to 1974.....	3,368	16.2	2,106	2,759	15.2	2,007	610	23.2	2,700
1965 to 1969.....	3,598	18.2	2,636	2,989	17.2	2,516	609	25.5	3,448
1960 to 1964.....	4,164	22.4	3,459	3,503	21.4	3,331	660	30.6	4,375
1955 to 1959.....	4,236	24.9	3,690	3,586	23.6	3,549	650	34.8	4,716
1950 to 1954.....	3,882	24.9	3,337	3,321	23.8	3,221	561	53.9	4,185
1945 to 1949.....	3,474	24.1	2,985	3,017	23.4	2,916	457	30.3	3,485
1940 to 1944.....	2,859	21.2	2,523	2,477	20.4	2,460	382	27.5	3,010
1935 to 1939.....	2,421	18.8	2,235	2,081	18.0	2,164	340	25.9	2,744
1930 to 1934.....	2,453	19.7	2,376	2,117	18.9	2,303	337	26.6	2,949
1925 to 1929.....	2,761	23.2	2,840	2,398	22.4	2,770	373	30.9	3,306
1920 to 1924.....	2,955	26.8	3,248	2,568	26.0	3,167	387	34.4	3,771
SINGLE-YEAR DATA									
1975.....	3,144	14.8	1,799	2,552	13.8	1,708	592	21.2	2,322
1974.....	3,160	14.9	1,857	2,576	14.0	1,768	584	21.4	2,377
1973.....	3,137	14.9	1,896	2,551	13.9	1,798	586	21.9	2,474
1972.....	3,258	15.6	2,021	2,656	14.6	1,918	603	22.9	2,651
1971.....	3,556	17.2	2,275	2,920	16.2	2,168	636	24.7	2,933
1970.....	3,731	18.4	2,480	3,091	17.4	2,385	640	25.1	3,067
1969.....	3,600	17.8	2,465	2,994	16.9	2,360	607	24.4	3,151
1968.....	3,502	17.5	2,477	2,912	16.6	2,368	589	24.2	3,197
1967.....	3,521	17.8	2,573	2,923	16.8	2,453	598	25.0	3,385
1966.....	3,606	18.4	2,736	2,993	17.4	2,609	613	26.1	3,614
1965.....	3,760	19.4	2,928	3,124	18.3	2,790	637	27.6	3,891

Source: See appendix A.

TABLE 1-3

**Age Specific Birth Rates for Women  
15 to 44 Years Old: 5-Year Averages, 1920-24 to 1970-74**

(Rates are live births per 1,000 women in specified age group)

Race and year	15 to 19 years	20 to 24 years	25 to 29 years	30 to 34 years	35 to 39 years	40 to 44 years
<b>WHITE</b>						
1970 to 1974.....	53	131	121	60	24	6
1965 to 1969.....	59	169	142	78	38	10
1960 to 1964.....	77	227	184	106	52	14
1955 to 1959.....	85	239	191	113	57	15
1950 to 1954.....	76	205	176	109	55	15
1945 to 1949.....	60	176	160	104	55	16
1940 to 1944.....	49	143	136	89	48	15
1935 to 1939.....	45	122	114	78	48	17
1930 to 1934.....	46	124	120	87	57	21
1925 to 1929.....	53	146	142	105	72	27
1920 to 1924.....	57	162	164	122	86	33
<b>BLACK AND OTHER RACES</b>						
1970 to 1974.....	124	165	119	70	35	10
1965 to 1969.....	133	203	145	93	51	17
1960 to 1964.....	142	256	199	126	70	21
1955 to 1959.....	154	269	201	130	73	21
1950 to 1954.....	148	232	176	111	66	20
1945 to 1949.....	128	192	140	90	58	18
1940 to 1944.....	114	164	117	75	52	19
1935 to 1939.....	105	150	105	68	55	20
1930 to 1934.....	97	147	109	79	62	24
1925 to 1929.....	106	165	135	93	77	29
1920 to 1924.....	107	186	154	102	95	36

Source: See appendix A.

TABLE 1-4

**Percent Childless Among Women Ever Married,  
for Selected Years: 1940 to 1975**

Year	All races		White		Black <sup>1</sup>	
	20 to 24 years	25 to 29 years	20 to 24 years	25 to 29 years	20 to 24 years	25 to 29 years
1975.....	42.8	21.1	45.1	21.7	20.6	16.2
1970.....	35.9	15.8	37.7	16.1	20.8	12.3
1965.....	28.0	11.7	28.7	11.8	22.4	10.5
1960.....	24.2	12.6	25.0	12.3	17.0	14.2
1950.....	33.3	21.1	34.0	20.1	28.6	29.6
1940.....	36.6	27.7	36.9	27.2	34.9	31.4

<sup>1</sup>Black and other races in 1940, 1950, and 1965.

Source: See appendix A.

TABLE 1-5

**Percent Distribution of the Population,  
by Age, for Selected Censuses: 1860 to 1920**

Age	1860	1880	1900	1920
All ages.....	100.0	100.0	100.0	100.0
0 to 9 years.....	28.7	26.7	23.8	21.8
10 to 19 years.....	22.5	21.4	20.5	19.0
20 to 29 years.....	18.2	18.3	18.3	17.4
30 to 39 years.....	12.8	12.7	13.8	15.0
40 to 49 years.....	8.3	9.1	10.1	11.5
50 to 59 years.....	5.1	6.2	6.8	7.9
60 to 69 years.....	2.8	3.6	4.1	4.8
70 years and over.....	1.5	2.0	2.4	2.7
Median age.....	19.4	20.9	22.9	25.3

Source: See appendix A.

TABLE 1-6

**Percent Distribution of Women, by Number of Children  
Ever Born by Age 49: Selected Birth Cohorts, 1870 to 1925**

Year of birth	Total	Number of children ever born					
		0	1	2	3	4	5 or more
1925.....	100.0	10.1	13.8	24.3	20.4	13.1	18.4
1920.....	100.0	12.4	17.2	25.5	18.5	11.1	15.3
1915.....	100.0	17.1	19.8	24.7	16.1	9.2	13.2
1910.....	100.0	21.5	21.8	22.5	13.6	7.9	12.7
1905.....	100.0	20.8	23.2	21.0	12.7	7.9	14.4
1900.....	100.0	20.4	20.9	19.7	13.2	8.4	17.5
1895.....	100.0	18.9	18.5	18.7	14.1	9.4	20.5
1890.....	100.0	20.4	15.1	16.3	13.5	10.1	24.5
1885.....	100.0	21.8	13.8	14.8	12.2	9.6	27.8
1880.....	100.0	21.9	12.8	13.4	11.5	9.3	31.1
1875.....	100.0	21.2	11.7	12.7	11.2	9.3	33.9
1870.....	100.0	20.0	10.7	12.0	10.8	9.5	37.1

Source: See appendix A.

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## Chapter 2.

# Family Formation and Dissolution

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Since the vast majority of children are born within legally recognized family units, the Nation's fertility is greatly affected by the age at which women first marry (women who marry young generally have more children than those who marry at later ages<sup>1</sup>) and by the proportion married in the prime childbearing years. Presumably, fertility is also affected by the stability of marriage during the years of highest fertility, with disrupted marriages decreasing the years of "exposure" to conceiving and bearing children.<sup>2</sup>

### Age at First Marriage and First Birth

The relationship between early marriage and fertility is clearly seen in table 2-1. This table shows the percentage of women, born in specified periods, who had ever been married at stated ages. Table 2-1 also shows total births and first births cumulated to ages 1 year later than those shown for percent first married.

Women born from 1935 to 1939, both Black and White, entered marriage at early ages in greater proportions than any other 5-year cohort of women born since 1925. About 54 percent of both Black women and White women in the 1935-39 cohort had married by age 20.5. Moreover, by age 21.5, 45 percent of the White women and 61 percent of the Black women had borne at least one child. By way of contrast, women born from 1950 to 1954, who were 20 to 25 years old in 1975, were relatively much slower to enter marriage and motherhood. By age 20.5, only 45 percent of White women and 34 percent of Black women had married. As a result, a far smaller proportion of these women had become mothers by age 21.5 (29 percent of White women

and 34 percent of Black women) than the proportion among women in the 1935-39 cohort.

### Effects of Early Childbearing

While the effects of the timing of first marriage on the timing of first birth might appear obvious to most persons, the consequences of early or late marriage go beyond those of simply how early or late in life family formation begins. Women who marry and bear children early have more children on the average than do women who "postpone" entering marriage until somewhat later in life. Evidence of this relationship is shown below and is based on data from the June 1975 Current Population Survey.<sup>3</sup> For women married long enough to show or project 20 years of marital experience, those who first married before 19 years of age averaged approximately one child per woman more than those first married after age 21. Women who first married from 19 to 21 years of age had an average number of children that was intermediate between the two extremes. The problems of early marriage and childbearing are compounded by the fact that couples who marry young tend to be relatively disadvantaged in terms of educational attainment.<sup>4</sup> This results in the further complication that women who form families at an early age and who tend to have more children than the average also tend to have less than average resources, especially financial, to cope with this situation.<sup>5</sup>

It already seems clear, based on the data now available, that attitudes and values relating to marriage and the family are quite different between "daughters" born in the baby boom and their "mothers" born in the 1930's. Less rapid entrance into marriage and motherhood, accompanied by greater independence and variety of lifestyles, has been

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<sup>1</sup> See U.S. Bureau of the Census, *Current Population Reports*, Series P-20, No. 308, "Fertility of American Women: June 1976," table 29.

<sup>2</sup> Data showing the effects of widowhood, separation, and divorce on lifetime marital fertility are not readily available. Recently reported research shows, however, that childbirth during marital disruption is a "surprisingly frequent occurrence"; see Ronald R. Rindfuss and Larry L. Bumpass, "Fertility During Marital Disruption," *Journal of Marriage and the Family*, Vol. 39, No. 3 (August 1977), pp. 517-528.

<sup>3</sup> U.S. Bureau of the Census, *Current Population Reports*, Series P-20, No. 315, "Trends in Childspacing: June 1975," table 30.

<sup>4</sup> See U.S. Bureau of the Census, *1970 Census of Population*, Subject Report PC(2)-4D, "Age at First Marriage," table 12.

<sup>5</sup> For recent evidence of the relationship between fertility and educational attainment and family income, see U.S. Bureau of the Census, *Current Population Reports*, Series P-20, No. 308, "Fertility of American Women: June 1976," tables 37 to 40.

Children Ever Born Per 1,000 Women by Age at First Marriage: June 1975

Period of first marriage	Age of woman at first marriage		
	14 to 18 years	19 to 21 years	22 years and over
1950 to 1959.....	3,508	3,210	2,477
1940 to 1949.....	3,460	3,046	2,239

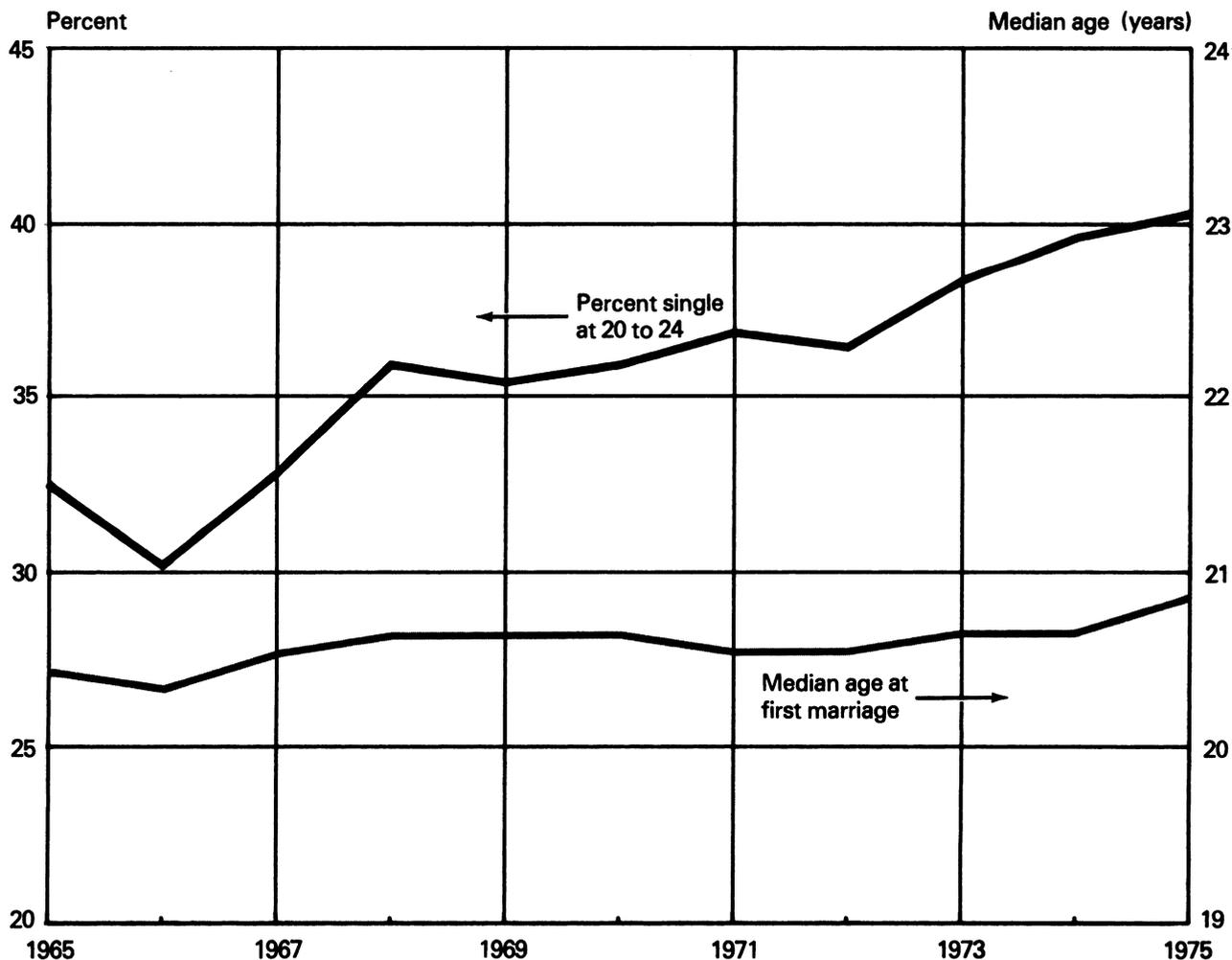
reported and commented upon in the popular press, journal articles, and government reports.<sup>6</sup> Figure 2-1 charts some interesting data relevant to these changes in family formation. While there was a larger than usual rise in 1975 in the median age of women first marrying in that year over the 1974 median, this statistic changed very little during the

period from 1965 to 1975, ranging from a low of 20.3 in 1966 to a high of 20.8 in 1975. However, the percentage of women remaining single (never married) in the age group 20 to 24 increased substantially during the same period. This is true for both Black and White women (table 2-2). The same phenomenon was also true for women 25 to 29 years old. These data certainly indicate a relative postponement of marriage among many young women today. Only time will tell whether or not the data are also pointing toward larger

<sup>6</sup> See, for example, U.S. Bureau of the Census, *Current Population Reports, Series P-20, No. 307, "Population Profile of the United States: 1976,"* pp. 9 and 10.

FIGURE 2-1

Median Age of Women at First Marriage and Percent Single Among Women 20 to 24 Years Old: 1965 to 1975



Source: See appendix A.

proportions of women remaining single throughout their entire lives.

### Interbirth Spacing Intervals

Further indications that family formation is proceeding at a slower pace in the 1970's than in the 1960's are shown in table 2-3, where spacing intervals for first order to fourth order births are detailed. For births occurring from 1970 to 1974, the median spacing interval (from first marriage to first birth and from the previous birth for second to fourth order births) is greater than in the preceding 15 to 20 years. This recent increase in spacing is observed among births to both Black women and White women, when comparing data from the 1960-64 and 1970-74 periods. (table 2-3).

Some of the most striking differences in the spacing of births between the two periods (1960-64 and 1970-74) are for the first and second births. About one-half (48

percent) of all first births to ever-married women in the earlier period had taken place by 1 year after the mother's first marriage; three-quarters had occurred by 2 years after the mother's marriage. Ten years later, in the 1970-74 period only 39 percent of first births occurred within 1 year of first marriage and about 60 percent occurred within 2 years. This difference in childspacing from the early 1960's to the early 1970's resulted in a 5-month increase in the median interval for first births after first marriage. The corresponding difference in the median interval from first to second births was 7 months. In fact, the number of ever-married women who had their second child within 2 years after the first child declined from almost 1 in 2 to 1 in 3.

The longer intervals between births, especially for births of second and higher orders, reflects the fact that more of the children born at each of these birth orders are their parents' last children. It has been shown that the second child who is the parents' last child is typically spaced at a

Children Ever Born Per 1,000 Women: June 1975

Age of woman	All ever-married women, married once	Women divorced after first marriage married twice or more
20 to 24 years.....	853	1,441
25 to 29 years.....	1,552	1,826
30 to 34 years.....	2,351	2,578
35 to 39 years.....	2,971	3,102
40 to 44 years.....	3,297	3,239
45 to 49 years.....	3,184	3,042
50 to 59 years.....	2,776	2,610

longer interval after the birth of the first child than is the second child of parents who have three or more children. The same pattern is observed for third and fourth children as well.<sup>7</sup>

### Marital Dissolution

Although dissolution through divorce is by no means the normal or most common outcome of marriage, the number of marriages which do end in divorce has been increasing substantially in recent years. Projections based on data now available suggest that about one-third of the first marriages among women who are currently in their late twenties and early thirties may end in divorce.<sup>8</sup>

The effects of marital disruption on fertility, and vice versa, are not well known, although there is some evidence to indicate that higher-than-average fertility may be associated with the likelihood of a marriage breaking up in divorce, especially in the earlier years of marriage. Data from the June 1975 Current Population Survey show that women in their twenties who divorced after their first marriage and then

remarried, had a substantially higher average number of children born at the survey date than did women who had been married only once. (See the above tabulation.)

The same kind of a difference holds true for women in their thirties, although it is not as great as for women in their twenties. Among women in their forties and fifties in 1975, either there was a negligible difference or women who had married only once had slightly higher average fertility than those who divorced and remarried. Basing a judgment on these data alone, one might conclude that relatively high fertility is often a cause of marital stress leading to divorce. While in many cases this may be so, it is also quite possible that marital disruption and high fertility are concomitant effects of the same cause, that is, a marriage which occurs too early in life.

Data showing the trend toward divorce at increasingly early ages are summarized in table 2-4. Almost without exception, the tabulation shows that, at each selected year of age, women born more recently have had a higher proportion of first marriages ending in divorce. About 1 woman in 10 among those who were born from 1945 to 1949 and who had married by June 1975 had also been divorced by age 24.5. A proportion this high among ever-married women born from 1900 to 1909 was not reached until that cohort was almost 40 years old. The increasing percentage of women

<sup>7</sup>U.S. Bureau of the Census, *Current Population Reports, Series P-20, No. 315, "Trends in Childspacing,"* p. 10.

<sup>8</sup>U.S. Bureau of the Census, *Current Population Reports, Series P-20, No. 297, "Number, Timing, and Duration of Marriages and Divorces in the United States: June 1975,"* pp. 3 and 4.

divorcing at early ages in more recent years almost surely portends increasing percentages of women who will eventually experience a divorce during their lifetimes. Projections based on the experience of older age groups suggest that women born from 1945 to 1949 are likely to have about 38 percent of their first marriages end in divorce. This proportion contrasts with a projection of 24 percent for the women born from 1925 to 1929 and 15 percent for those born from 1905 to 1909.<sup>9</sup>

It is too early as yet to try to predict what the effects on fertility may be from the combination of relatively slower entrances into marriage (table 2-1) and more rapid and frequent dissolution of marriage through divorce. Individually, both factors would seem to inhibit fertility. Still, much will depend on how the factors interact. If those who do marry young in the future also have high fertility and become increasingly likely to end their marriages in divorce, the inhibiting effects of divorce may be minimal—especially if they rapidly remarry. However, if divorce becomes relatively common among women regardless of age at first marriage, this could act to reduce fertility by shortening the number of women's reproductive years spent within marriage.

### Changes in the Life Cycle of Families

The concept of the "family life cycle" is one which provides a useful means of summarizing the timing of vital events occurring within a family and of comparing differences or similarities in timing from one age group to another. Statistical measures of the family life cycle are assumed to be those of an average family in a given historical period, in which the marriage of the husband and wife is disrupted only by the death of one of them.<sup>10</sup>

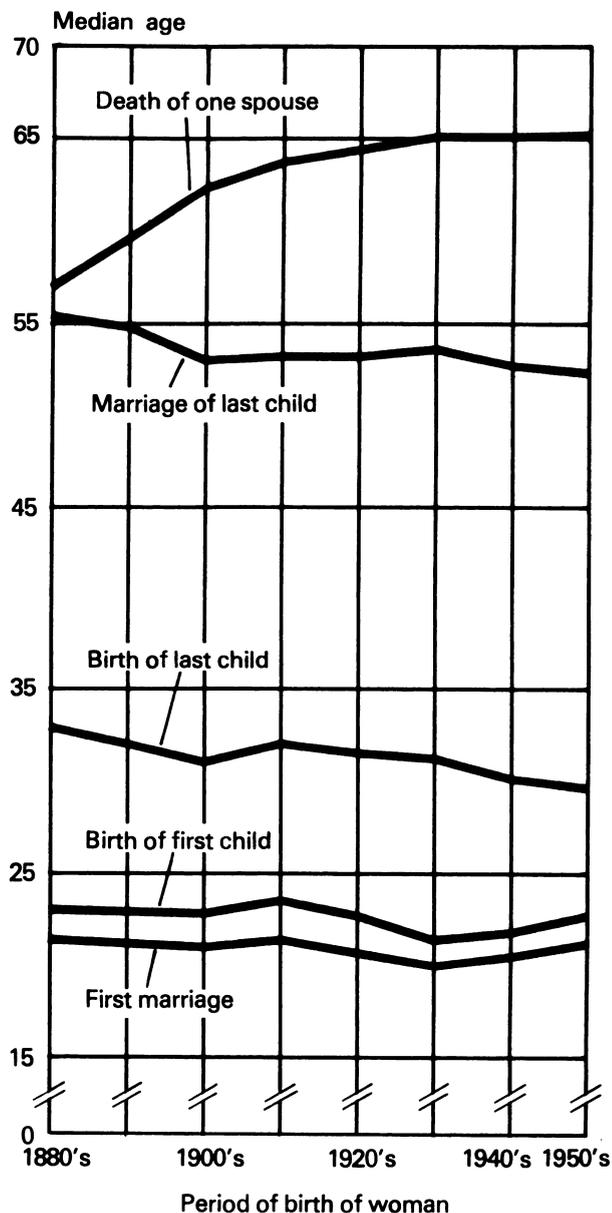
To the extent that the median age of mothers at various stages of the family life cycle can be accurately estimated for older cohorts and projected for younger ones, the data of table 2-5 show historical changes in the median age of a mother at all stages of the cycle. The median age at first marriage ranges from a low of 20.0 years for women born in the 1930's to 21.4 for those born in the 1880's. The highest median age at first birth (23.5 years) occurred to women who were in their most fertile years in the decade of the Great Depression; the lowest (21.4 years) was registered by women who were in their twenties and early thirties during the baby boom years of the 1950's and early 1960's. The median age of a mother at the marriage of her last child is projected to differ by only 3 years between women born in the 1880's (55.4 years) and those born in the 1950's (52.3 years).

The factor that has made the greatest change in the life cycle of the "typical" family has been the increase in life expectancy. A woman born in the 1880's could expect to be only 57 years old when death would dissolve her marriage. As a result of substantial improvements in the control of

mortality, a woman born in the 1920's and 1930's can expect to be about 65 years old before death claims her or her husband.

If the life cycle projections for the families of women born as recently as the 1950's eventually hold up, young parents of today, who conform to the one-spouse/no-divorce assumptions of the model, can expect over 10 more years of living together after their children have left home than could their "grandparents" of the 1880's. This is due principally to the improvement in mortality noted above (see figure 2-2).

**FIGURE 2-2**  
**Median Age of Mothers at Selected Stages of the Family Life Cycle**



Source: See appendix A.

<sup>9</sup> *Ibid.*, p. 6.

<sup>10</sup> For a discussion of the assumptions underlying family life cycle analysis, see Arthur Norton, "The Family-Life Cycle Updated," in Robert F. Winch and Graham B. Spanier (eds.), *Selected Studies in Marriage and the Family*, 4th ed. (New York: Holt, Rinehart and Winston, Inc., 1974), pp. 162-170.

TABLE 2-1

**Percent First Married and Births Per  
1,000 Women Cumulated to Specified Ages**

(Single women counted as childless. For meaning of symbols, see page IX)

Subject	Year of woman's birth					
	1950 to 1954	1945 to 1949	1940 to 1944	1935 to 1939	1930 to 1934	1925 to 1929
<b>WHITE</b>						
Women <sup>1</sup> ..... (thousands) ..	7,911	7,234	5,888	5,165	5,052	5,346
Percent first married by age:						
16.5 years.....	3.8	4.8	6.4	7.2	6.6	5.2
18.5 years.....	20.3	20.7	24.1	26.6	25.3	20.5
20.5 years.....	45.4	45.2	50.3	54.4	50.6	44.4
22.5 years.....	<sup>2</sup> 63.5	68.6	70.9	73.4	70.1	66.6
24.5 years.....	<sup>2</sup> 73.9	81.0	82.1	83.6	82.4	78.7
29.5 years.....	...	<sup>2</sup> 90.0	92.2	92.1	92.1	90.2
Total births per 1,000 women cumulated to age:						
17.5 years.....	52	60	72	67	63	43
19.5 years.....	197	225	288	286	247	179
21.5 years.....	<sup>2</sup> 396	513	663	692	610	467
23.5 years.....	<sup>2</sup> 615	827	1,059	1,178	1,059	823
25.5 years.....	(NA)	1,128	1,429	1,638	1,536	1,217
30.5 years.....	...	(NA)	2,093	2,425	2,478	2,118
First births per 1,000 women cumulated to age:						
17.5 years.....	46	52	61	61	55	38
19.5 years.....	159	177	211	218	192	143
21.5 years.....	<sup>2</sup> 287	359	414	450	409	331
23.5 years.....	<sup>2</sup> 396	508	579	638	581	504
25.5 years.....	(NA)	620	691	753	722	645
30.5 years.....	...	(NA)	842	864	854	822
<b>BLACK</b>						
Women <sup>1</sup> ..... (thousands) ..	1,171	929	786	669	659	639
Percent first married by age:						
16.5 years.....	3.9	5.2	9.4	13.4	11.5	10.1
18.5 years.....	16.7	20.9	26.0	32.8	28.6	25.3
20.5 years.....	34.4	40.4	46.2	54.8	47.3	47.3
22.5 years.....	<sup>2</sup> 49.4	54.8	60.9	66.3	64.7	63.3
24.5 years.....	<sup>2</sup> 57.4	66.5	70.5	74.5	73.0	72.2
29.5 years.....	...	<sup>2</sup> 77.3	82.8	84.3	84.7	83.6
Total births per 1,000 women cumulated to age:						
17.5 years.....	140	191	252	256	247	227
19.5 years.....	354	478	652	644	567	483
21.5 years.....	<sup>2</sup> 574	785	1,120	1,176	1,020	778
23.5 years.....	<sup>2</sup> 738	1,077	1,557	1,703	1,508	1,171
25.5 years.....	(NA)	1,347	1,904	2,182	1,945	1,547
30.5 years.....	...	(NA)	2,529	2,988	2,805	2,429
First births per 1,000 women cumulated to age:						
17.5 years.....	112	155	187	190	178	184
19.5 years.....	237	324	405	401	371	322
21.5 years.....	<sup>2</sup> 336	454	554	606	533	465
23.5 years.....	<sup>2</sup> 402	541	647	709	639	567
25.5 years.....	(NA)	594	701	758	719	652
30.5 years.....	...	(NA)	788	809	786	768

<sup>1</sup>Number of women and percent first married are based on June 1976 Current Population Survey; data on births are from the June 1975 Current Population Survey.

<sup>2</sup>Data adjusted for the part of the cohort that has not completed the stated age. For an explanation of the method of adjustment see appendix C, in U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 315.

Source: See appendix A.

TABLE 2-2

Percent Single Among Women  
20 to 24 and 25 to 29 Years Old: 1965 to 1976

Year of survey	All races		White		Black	
	20 to 24 years	25 to 29 years	20 to 24 years	25 to 29 years	20 to 24 years	25 to 29 years
1976.....	42.6	14.8	40.5	12.5	57.2	31.2
1975.....	40.3	13.8	38.2	12.2	54.7	25.8
1974.....	39.6	13.1	38.2	11.7	49.0	23.7
1973.....	38.3	12.1	36.8	10.6	47.5	22.9
1972.....	36.4	12.4	34.8	11.2	46.9	21.1
1971.....	36.8	12.0	35.1	10.3	48.4	24.2
1970.....	35.9	10.7	34.7	9.5	43.3	19.0
1969.....	35.4	11.0	33.9	9.8	45.2	19.9
1968.....	35.9	10.3	34.9	9.1	42.2	18.9
1967.....	32.8	9.9	32.0	9.2	<sup>1</sup> 38.5	<sup>1</sup> 14.8
1966.....	30.2	9.7	29.1	8.8	<sup>1</sup> 38.0	<sup>1</sup> 15.7
1965.....	32.5	8.4	32.2	8.0	<sup>1</sup> 34.3	<sup>1</sup> 11.6

<sup>1</sup>Data are for persons of Black and other races.

Source: See appendix A.

TABLE 2-3

**Birth Spacing Intervals of First to Fourth Births,  
by Calendar Period of Child's Birth, for Women Ever Married: June 1975**

Birth order and interval from mother's first marriage	Year of child's birth and race of mother								
	All races					White		Black	
	1970 to 1974	1965 to 1969	1960 to 1964	1955 to 1959	1950 to 1954	1970 to 1974	1960 to 1964	1970 to 1974	1960 to 1964
<b>FIRST BIRTHS</b>									
Births.....(thousands)..	6,202	5,869	5,717	6,123	5,781	5,445	4,997	598	634
Cumulative Percent									
Before mother's first marriage.....	7.4	10.3	9.3	7.9	6.5	5.3	5.5	24.9	38.4
After mother's first marriage:									
6 months.....	19.8	22.3	19.6	16.0	12.5	17.3	14.9	41.9	55.4
9 months.....	30.4	36.1	33.0	27.4	21.8	28.0	29.2	51.6	63.2
12 months.....	39.2	49.0	48.3	41.6	36.0	37.1	45.5	58.6	70.5
24 months.....	59.6	71.5	74.9	67.3	62.9	57.9	73.9	74.4	83.7
36 months.....	74.8	82.5	83.9	78.6	76.2	73.7	83.1	85.1	90.0
48 months.....	83.3	88.8	89.4	83.9	83.7	82.7	89.1	89.3	92.1
Median interval.....	17.4	12.5	12.6	15.5	17.0	18.6	13.6	8.5	4.1
<b>SECOND BIRTHS</b>									
Births.....(thousands)..	4,833	4,467	5,187	5,545	5,380	4,242	4,545	488	569
Cumulative Percent									
12 months after birth of first child..	5.5	7.6	9.3	7.8	7.4	5.1	8.8	8.6	13.6
24 months.....	32.3	41.3	48.6	45.7	40.1	31.6	48.2	37.9	52.1
36 months.....	59.8	66.6	71.4	69.1	64.7	59.3	71.5	63.4	70.3
48 months.....	78.2	80.3	82.5	80.7	77.6	78.4	82.6	77.4	81.5
Median interval.....	31.7	28.1	24.7	26.2	28.8	32.0	24.9	29.7	23.3
<b>THIRD BIRTHS</b>									
Births.....(thousands)..	2,437	2,917	3,982	4,077	3,328	2,082	3,458	314	470
Cumulative Percent									
12 months after birth of second child.	6.0	8.5	8.2	7.9	8.3	5.9	7.4	5.4	14.5
24 months.....	29.8	37.6	40.7	40.1	38.9	28.7	38.8	34.8	55.4
36 months.....	51.1	56.3	62.8	60.7	59.8	50.3	61.0	54.6	76.6
48 months.....	67.4	70.3	75.1	73.6	74.2	66.6	73.9	70.0	83.4
Median interval.....	35.4	32.0	29.0	29.8	30.4	35.8	30.1	33.2	22.0
<b>FOURTH BIRTHS</b>									
Births.....(thousands)..	1,173	1,774	2,481	2,504	1,700	963	2,104	183	346
Cumulative Percent									
12 months after birth of third child..	7.3	6.8	7.1	6.2	5.2	6.6	7.0	11.1	7.9
24 months.....	32.6	34.7	39.7	38.8	37.1	31.6	36.9	38.4	55.5
36 months.....	51.5	56.2	63.5	66.0	64.0	50.6	60.2	55.1	82.3
48 months.....	63.7	71.4	75.4	79.9	76.2	63.6	73.3	63.9	87.9
Median interval.....	35.0	32.5	29.2	28.9	29.8	35.6	30.7	32.3	22.4

Source: See appendix A.

TABLE 2-4

**Age at Divorce After First Marriage, by Year of Woman's Birth,  
for Women Born from 1900-09 to 1945-49: June 1975**

(For meaning of symbols, see page IX)

Age at divorce after first marriage	Year of woman's birth						
	1945 to 1949	1940 to 1944	1935 to 1939	1930 to 1934	1920 to 1929	1910 to 1919	1900 to 1909
Women ever married as of June 1975.....(thousands)..	17,918	16,561	5,607	5,562	11,613	9,721	6,958
Cumulative percent to age:							
19.5 years.....	1.4	2.1	1.7	1.3	1.3	1.2	0.7
24.5 years.....	9.5	8.3	7.6	5.6	5.7	3.7	3.0
29.5 years.....	(NA)	15.1	12.9	10.6	9.7	7.0	5.6
34.5 years.....	...	(NA)	17.7	14.5	12.5	10.3	7.9
39.5 years.....	...	...	(NA)	18.2	15.1	12.4	10.2
44.5 years.....	...	...	...	(NA)	17.4	13.9	11.7

<sup>1</sup>Projected on the assumption that 95 percent of women in these cohorts will eventually marry.

Source: See appendix A.

TABLE 2-5

**Median Age of Mothers  
at Selected Stages of the Family Life Cycle**

Stage of the family life cycle	Period of birth of mother							
	1950 to 1959	1940 to 1949	1930 to 1939	1920 to 1929	1910 to 1919	1900 to 1909	1890 to 1899	1880 to 1889
Median age at:								
First marriage.....	21.2	20.5	20.0	20.7	21.4	21.0	21.2	21.4
Birth of first child.....	22.7	21.8	21.4	22.7	23.5	22.8	22.9	23.0
Birth of last child.....	29.6	30.1	31.2	31.5	32.0	31.0	32.0	32.9
Marriage of last child...	52.3	52.7	53.6	53.2	53.2	53.0	54.8	55.4
Death of one spouse.....	65.2	65.1	65.1	64.4	63.7	62.3	59.6	57.0
Difference between:								
Median ages at births of first and last children.....	6.9	8.3	9.8	8.8	8.5	8.2	9.1	9.9
Age at marriage of last child and death of one spouse.....	12.9	12.4	11.5	11.2	10.5	9.3	4.8	1.6

Source: See appendix A.

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## Chapter 3.

# Birth Expectations

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The collection of statistics about women's childbearing plans has had a short history in the United States in comparison with the collection of birth statistics. Public opinion surveys have been taken since the 1930's and have occasionally asked women what they considered to be the "ideal family size."<sup>1</sup> However, the usefulness of these data for fertility projection purposes is minimal since they are not based on each woman's evaluation of her personal circumstances. Thus, the first Growth of American Families Survey (GAF) was taken in 1955 to enable demographers and planners to develop realistic population projections. Included was a question on the number of births a woman actually expected to have in the future.<sup>2</sup> Although this survey was limited to currently married White women 18 to 39 years old, subsequent fertility surveys sponsored by governmental and private agencies have expanded the survey universe in recent years to include all women, regardless of marital status, in a broad age range of the childbearing years.<sup>3</sup>

The exposition that follows is based on data from the GAF surveys of 1955 and 1960, the National Fertility Study of 1965, and various surveys conducted by the Census Bureau since 1967.

### Average Numbers of Lifetime Births Expected

From 1955 to 1965, lifetime births expected by White wives 18 to 24 years old averaged between 3.0 and 3.2 births per woman (table 3-1). During the 1965-76 period, a time of

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<sup>1</sup> For estimates of ideal family size, see Judith Blake, "Can We Believe Recent Data on Birth Expectations in the United States?" *Demography*, Vol. 11, No. 1 (February 1974), pp. 25-44.

<sup>2</sup> Ronald Freedman, P. K. Whelpton, and Arthur A. Campbell, *Family Planning, Sterility and Population Growth* (New York: McGraw-Hill Book Company, 1959).

<sup>3</sup> Maurice J. Moore, "Asking Single Women About their Children: The Census Bureau's Experience," *Proceedings of the American Statistical Association Annual Meeting, August 23-26, 1976*, in Boston, Edwin D. Goldfield, ed. (Washington, D.C.: The American Statistical Association, 1976), pp. 618-623.

considerable change in the social roles of women both in the household and in the labor force, young White wives lowered their birth expectations by about one child to 2.1 births per woman. A comparable decline also occurred among Black wives 18 to 24 years old from 3.4 lifetime births expected in 1965 to 2.3 lifetime births in 1976.

For wives 25 to 29 and 30 to 34 years old, declines in lifetime expectations amounting to about one child per woman were recorded for both White and Black wives during the 1965-76 period. Some evidence of a downward trend is also reflected in the statistics for wives who were 35 to 39 years old in 1965 and 1976, most of whom spent some portion of their prime childbearing years during the high fertility period of the 1950's and early 1960's. As the women who spent their principal reproductive period during the late 1960's and 1970's enter the 35 to 39 year old age group, a decline in the average number of lifetime births expected by women in this age group can be anticipated.

Since the average number of lifetime births a woman expects is composed of the number of children already born to date and the number of additional births expected over her entire reproductive career, birth expectations are not subject to as rapid fluctuations as annual fertility rates. In fact, changes in expectations may lag behind the basic changes in annual fertility measures. It may be that once a fertility pattern develops, people may adjust their expectations to their actual fertility behavior.<sup>4</sup> Evidence in support of this assertion is shown in table 3-1 for White women. For wives 18 to 24 years old, where approximately one-third of lifetime birth expectations is composed of actual births to date, little indication of a downturn was noticed until 1967, approximately 10 years after the peak of the baby boom (see chapter 1).

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<sup>4</sup> For a further explanation of this phenomena, see Richard A. Easterlin, "Relative Economic Status and the American Fertility Swing," in Eleanor B. Sheldon, ed., *Family Economic Behavior* (Philadelphia: Lippincott, 1973), pp. 170-223.

Lifetime births expected is a measure comparable to completed fertility and may best serve as a predictor of completed fertility for women still in their childbearing years. The 1960 GAF survey contained fertility projections for currently married women interviewed in the study, as well as for unmarried women who were not interviewed at the time but who would subsequently marry before the end of their childbearing years. Table 3-2 shows the "most likely" projections of completed fertility based on the 1960 GAF study. Also shown are average numbers of children born to date for all ever-married women, as reported in the June 1976 Current Population Survey (CPS). Although the youngest cohorts have not yet completed all of their reproductive years, the number of additional births occurring to women 36 to 40 and 41 to 45 years old in 1976 will be negligible.

The differences between the projections based on the 1960 GAF expectations data and the cumulative fertility estimates from the 1976 CPS are extremely small. The largest difference between projected and actual fertility occurs among the 1936-40 birth cohort for which the estimates of actual fertility of those women is 4 percent higher than the 1960 projection. The accuracy demonstrated by these expectations data presents an encouraging argument for the continued utilization of these data for fertility projections.

### Trends in Expected Births

Although American wives have reduced both their actual fertility and their birth expectations over time, being childless does not appear to be the anticipated way of married life. Only 5.4 percent of married women in 1976 expected to be childless, as compared with 4 percent in 1960; nevertheless, large changes in the distribution of expected lifetime births have occurred in the past 20 years (table 3-3). The preference for a two-child family has rapidly increased from only one-fourth of the couples in 1960 to almost one-half in 1976. Counterbalancing this rise has been the sharp decline in the number of women expecting families of four or more children. The growing concentration of families in the two-child category not only has demographic implications in terms of population growth, but also social implications in terms of child development, disposition of family resources, and the amount of parental attention provided to children.<sup>5</sup>

In addition to the decline in the average number of lifetime births that has occurred, an increasing number of women are expecting to terminate their childbearing careers at earlier ages. A large increase in the proportion of White wives expecting no future births took place between 1955 and 1976 (table 3-4). Thus, women are not only having fewer children on the average but are also limiting their childbearing to a shorter span of time. In 1976, almost 100 percent of wives 35 to 39 years old believed that they had completed their childbearing careers as compared with only 75 percent in 1955.

The increasing number of women expecting no future births can be viewed as a consequence of several factors that have become prominent in recent years. The availability of highly effective contraceptive methods (including sterilization) and the liberalization of abortion legislation make an early termination of a woman's childbearing years more feasible today than in the 1950's. Moreover, the increasing opportunities for women to develop their own careers outside the home may serve as an incentive for many women to abbreviate their childbearing period.

### Variations in Expected Lifetime Fertility

Average numbers of lifetime births expected by women of different marital statuses are shown in table 3-5. Birth expectations of single women 18 to 24 years old closely approximate those of currently married women of the same age, especially childless women. The difference between single and currently married women with respect to the expected number of lifetime births, however, is much larger for older women. Currently married women 30 to 34 years old in 1976 expect to end their childbearing with an average of 2.5 lifetime births, whereas single women in this age group expect an average of 0.9 lifetime births; almost all of this difference is due to the number of children already born. When the comparison is limited to childless women in this age group, the number of lifetime births expected differs very little between currently married women and those who are single. The same is true to a large extent for other age groups as well.

Birth expectations do not appear to show any consistent pattern for widowed, divorced, and separated women. These women generally expect more children during their lifetimes than single women but fewer children than currently married women, although widowed, divorced, and separated women who are childless expect fewer future births than either single or married women who are childless.

The most important age group in the analysis of birth expectations data is the 18 to 24 year olds, because women in this group have most of their reproductive lifespan ahead of them. Married women of this age in 1976 had borne only 38 percent of the lifetime number of children expected during their lifetimes, in comparison with wives 30 to 34 and 35 to 39 years old who had borne 93 and 99 percent, respectively, of their expected lifetime births.

Socioeconomic variations in the average number of births to date and the number of lifetime births expected by women 18 to 24 years old are presented in table 3-6. Within each subject category, variations in lifetime births expected are small in comparison with the actual number of births to date. For example, the average number of births to date ranges from 0.4 children per woman for wives with some college education to 1.4 children per woman for wives with less than a high school education. The range in average number of lifetime births expected, which may be thought of as a projection of completed fertility by women themselves, is relatively small; wives with less than 12 years of schooling expect on the average only 0.2 children more than wives with some college education.

<sup>5</sup> Peter H. Lindhert, "Sibling Position and Achievement," *Journal of Human Resources*, Vol. 12, No. 2 (Spring 1977), pp. 198-219.

Family income, which is usually a clearly discriminating variable in fertility analysis, shows no distinctive pattern with lifetime birth expectations in table 3-6 when controls are made for the labor force status of the wife. Although a negative relationship is usually observed between lifetime fertility and family income for older women,<sup>6</sup> annual family income for wives 18 to 24 years old may not truly represent the lifetime income potential of the family.<sup>7</sup>

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<sup>6</sup>See U.S. Bureau of the Census, *Current Population Reports, Series P-20, No. 308, "Fertility of American Women: June 1976."*

<sup>7</sup>For a detailed discussion of the effect of income on fertility, see Richard A. Easterlin, "Towards a Socio-Economic Theory of Fertility," in S. J. Behrman, Leslie Corsa, and Ronald Freedman, eds., *Fertility and Family Planning: A World View* (Ann Arbor: University of Michigan Press, 1969), pp. 127-156.

Young wives 18 to 24 years old who have married while in their teens and wives who are not in the labor force are characterized by having completed approximately 50 percent of their expected lifetime fertility. Undoubtedly, women who began their childbearing careers while teenagers and who intend to have a completed family size similar to women of a comparable age who currently have significantly fewer births to date must demonstrate a high degree of fertility control. However, wives 18 to 24 years old who have a relatively large number of children already born and who are in the lower socioeconomic categories are usually less effective in their use of contraceptive techniques,<sup>8</sup> and thus are somewhat less likely than others to live within the bounds of the fertility level they expect in the future.

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<sup>8</sup>See Chapter 6 of this report, "Contraception and Abortion."

TABLE 3-1

**Average Number of Births to Date and Lifetime Births Expected  
by Currently Married Women, for Selected Years: 1955 to 1976**

Race and year	18 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years	
	Births to date	Lifetime births expected						
<b>ALL RACES</b>								
1976.....	0.8	2.1	1.6	2.2	2.3	2.5	3.0	3.0
1971.....	1.0	2.4	1.9	2.6	2.8	3.0	3.2	3.3
1967.....	1.2	2.9	2.3	3.0	3.0	3.3	3.2	3.3
1965.....	1.5	3.1	2.5	3.4	3.1	3.6	3.2	3.4
1960.....	1.4	3.1	2.4	3.4	2.7	3.3	2.7	3.0
<b>WHITE</b>								
1976.....	0.8	2.1	1.5	2.2	2.3	2.5	2.9	2.9
1971.....	0.9	2.4	1.9	2.6	2.8	2.9	3.1	3.2
1967.....	1.1	2.9	2.3	3.0	3.0	3.2	3.1	3.2
1965.....	1.3	3.1	2.4	3.3	3.0	3.5	3.1	3.3
1960.....	1.3	3.0	2.3	3.3	2.6	3.2	2.7	3.0
1955.....	1.1	3.2	1.9	3.1	2.3	3.0	2.6	2.9
<b>BLACK</b>								
1976.....	1.3	2.3	2.0	2.5	2.7	2.9	3.6	3.6
1971.....	1.4	2.6	2.5	3.1	3.5	3.7	4.1	4.2
1967.....	1.8	2.8	3.0	3.4	3.9	4.3	4.2	4.2
1965.....	2.1	3.4	3.4	4.0	3.8	4.4	3.8	4.1

Source: See appendix A.

TABLE 3-2

**Completed Fertility Projected in 1960 and Actual Lifetime Fertility  
as of June 1976, for Birth Cohorts from 1921-25 to 1936-40**

Year of birth	Age in 1960	Completed fertility projected in 1960 <sup>1</sup>	Age in 1976	Actual lifetime fertility as of June 1976 <sup>2</sup>	Ratio of actual to projected lifetime fertility
1921 to 1925.....	35 to 39 years	2,930	51 to 55 years	2,890	0.986
1926 to 1930.....	30 to 34 years	3,225	46 to 50 years	3,125	0.969
1931 to 1935.....	25 to 29 years	3,255	41 to 45 years	3,228	0.992
1936 to 1940.....	20 to 24 years	2,900	36 to 40 years	3,020	1.041

<sup>1</sup>Includes estimates for women marrying after 1960 who would marry by age 45 to 49 but excludes children ever born to single women who do not marry.

<sup>2</sup>Rates are for ever-married women as of June 1976.

Source: See appendix A.

TABLE 3-3

**Percent Distribution of Lifetime Births Expected by  
Reporting Wives 18 to 39 Years Old, for Selected Years: 1955 to 1976**

Race and year	Lifetime births expected					
	Total	None	1	2	3	4 or more
<b>ALL RACES</b>						
1976.....	100.0	5.4	10.8	45.1	22.9	15.8
1971.....	100.0	4.2	7.4	38.3	26.2	24.0
1967.....	100.0	3.1	6.2	29.3	28.6	32.9
1960.....	100.0	4.0	7.0	25.0	27.0	37.0
<b>WHITE</b>						
1976.....	100.0	5.6	10.6	45.8	23.0	15.1
1971.....	100.0	4.1	7.2	38.9	26.7	23.1
1967.....	100.0	3.0	6.0	29.9	29.3	31.9
1960.....	100.0	4.0	7.0	25.0	29.0	35.0
1955.....	100.0	5.0	8.0	28.0	26.0	33.0
<b>BLACK</b>						
1976.....	100.0	3.6	12.8	35.2	23.5	24.8
1971.....	100.0	4.1	8.0	27.9	21.6	38.4
1967.....	100.0	4.0	9.4	22.3	22.6	41.8

Source: See appendix A.

TABLE 3-4

**Percent of White Wives Expecting  
No Future Births, for Selected Years: 1955 to 1976**

Year	18 to 24 years	25 to 29 years	30 to 34 years	35 to 39 years
1976.....	28	59	87	97
1971.....	25	58	87	97
1967.....	22	56	85	94
1965.....	24	51	74	89
1960.....	15	37	58	76
1955.....	14	33	56	75

Source: See appendix A.

TABLE 3-5

Lifetime Births Expected Per 1,000 Women,  
by Number of Births to Date and Marital Status: June 1976

Marital status and births to date	18 to 24 years	25 to 29 years	30 to 34 years
<b>ALL MARITAL CLASSES</b>			
Total.....	2,031	2,099	2,445
Childless.....	1,924	1,301	522
1 or more children.....	2,223	2,402	2,717
<b>CURRENTLY MARRIED<sup>1</sup></b>			
Total.....	2,141	2,202	2,535
Childless.....	1,956	1,430	615
1 or more children.....	2,291	2,402	2,705
<b>WIDOWED, DIVORCED, AND SEPARATED</b>			
Total.....	1,942	2,161	2,575
Childless.....	1,646	954	288
1 or more children.....	2,050	2,424	2,815
<b>SINGLE</b>			
Total.....	1,931	1,424	939
Childless.....	1,920	1,174	460
1 or more children.....	2,015	2,311	2,483

<sup>1</sup>Excludes women who are separated.

Source: See appendix A.

TABLE 3-6

**Births to Date and Lifetime Births Expected  
Per 1,000 Wives 18 to 24 Years Old: June 1976**

Subject	Per 1,000 wives	
	Births to date	Lifetime births expected
<b>METROPOLITAN-NONMETROPOLITAN RESIDENCE</b>		
Total.....	818	2,141
Metropolitan.....	770	2,155
Nonmetropolitan.....	896	2,118
<b>EDUCATION</b>		
Total.....	818	2,141
Not a high school graduate.....	1,371	2,237
High school, 4 years.....	768	2,141
College, 1 year or more.....	366	2,044
<b>LABOR FORCE STATUS</b>		
Total.....	818	2,141
In labor force.....	541	2,011
Not in labor force.....	1,169	2,306
<b>AGE AT FIRST MARRIAGE</b>		
Total.....	818	2,141
14 to 19 years.....	1,016	2,151
20 and 21 years.....	444	2,157
22 to 24 years.....	238	2,016
<b>FAMILY INCOME<sup>1</sup></b>		
Wife in labor force <sup>2</sup> .....	534	2,020
Under \$3,000.....	678	2,169
\$3,000-\$4,999.....	877	2,227
\$5,000-\$7,499.....	780	2,052
\$7,500-\$9,999.....	701	1,933
\$10,000-\$14,999.....	478	2,011
\$15,000 and over.....	276	2,009
Wife not in labor force <sup>2</sup> .....	1,182	2,315
Under \$3,000.....	1,233	2,323
\$3,000-\$4,999.....	1,506	2,328
\$5,000-\$7,499.....	1,164	2,230
\$7,500-\$9,999.....	1,090	2,392
\$10,000-\$14,999.....	1,176	2,339
\$15,000 and over.....	1,130	2,260

<sup>1</sup>For wives in husband-wife primary families.

<sup>2</sup>Includes wives for whom family income was not reported.

Source: See appendix A.

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## Chapter 4.

# Variations in American Fertility

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The first chapter in this report outlined trends in American fertility that have occurred since the mid-1800's. This section further investigates different levels of fertility according to various population groups in the Nation. The principal fertility measure employed in the following analysis is the number of children ever born. This is a cumulative measure that indicates the number of live born children a woman has had by the time of the survey.

With the exception of race, almost all characteristics discussed in this section are subject to change. Thus, while changes in residence, education, employment, and income may have an influence on the number of children borne by a woman, they also may be the consequences of established childbearing patterns.<sup>1</sup>

### Geographic Variations

In interpreting regional variations in fertility, consideration must be given to the underlying social and economic composition of the area which affects the fertility rate. With the general diminution of socioeconomic differences between the regions in the United States through the processes of urbanization and economic growth, regional fertility patterns have lost the distinctiveness which they once possessed.

Figures 4-1 and 4-2 show the average numbers of children born to ever-married women by race and region of residence for the 2 census years of 1910 and 1970. In 1910, the highest fertility rates for both Black and White women 20 years old and over were recorded by women residing in the South. The oldest group of women in 1910, who were born just after the Civil War, exhibited considerable variation in

the level of fertility. Black women 40 to 44 years old in 1910, who were living in the Northeast at the time of the census had already borne an average of 3.3 children, in comparison with women in the same age group who were living in the South who had borne an average of 5.9 children. The corresponding range for White women aged 40 to 44 in 1910 was 3.7 for women living in the West to 5.3 for women living in the South.

By 1970, a significant reduction in both the level of fertility and the amount of interregional variation in fertility had occurred. Among Black women, those living in the South still had the highest fertility, although they recorded the sharpest decline in fertility since 1910. The greatest decline in fertility among White women occurred for women living in the South; in fact, by 1970, the highest fertility rates for White women generally were recorded in the North Central States.

Figure 4-3 illustrates the urban-rural continuum in fertility differentials for Whites and Blacks as reported in the 1970 census. The variation in fertility by residence is considerably greater among Black women—who reflect the more traditional disparities in fertility by urban and rural residence—than among White women. The average number of children ever born to women 30 years old and over is from two to three children less among Black central-city residents than among Black rural-farm residents, whereas the corresponding difference for White women is less than one child per woman. Although these urban-rural differences are significant in themselves, their influence in determining more general levels of fertility is waning. As the proportion of the population living in rural areas continues to decline, urban-rural differences in fertility will contribute less and less to interregional differences in fertility.<sup>2</sup>

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<sup>1</sup> Several studies on changes in socioeconomic status and reproductive behavior over the life cycle have been made. See, for example, Charles F. Westoff, Robert G. Potter, and Philip C. Sagi, *The Third Child* (Princeton: Princeton University Press, 1963); Ronald Freedman and Lolagene Coombs, "Childspacing and Family Economic Position," *American Sociological Review*, Vol. 31 (October 1966), pp. 631-648; and Greg J. Duncan and James N. Morgan, *Family Composition Change and Other Analyses of the First Seven Years of the Panel Study of Income Dynamics* (Ann Arbor: Institute for Social Research, Survey Research Center, 1976).

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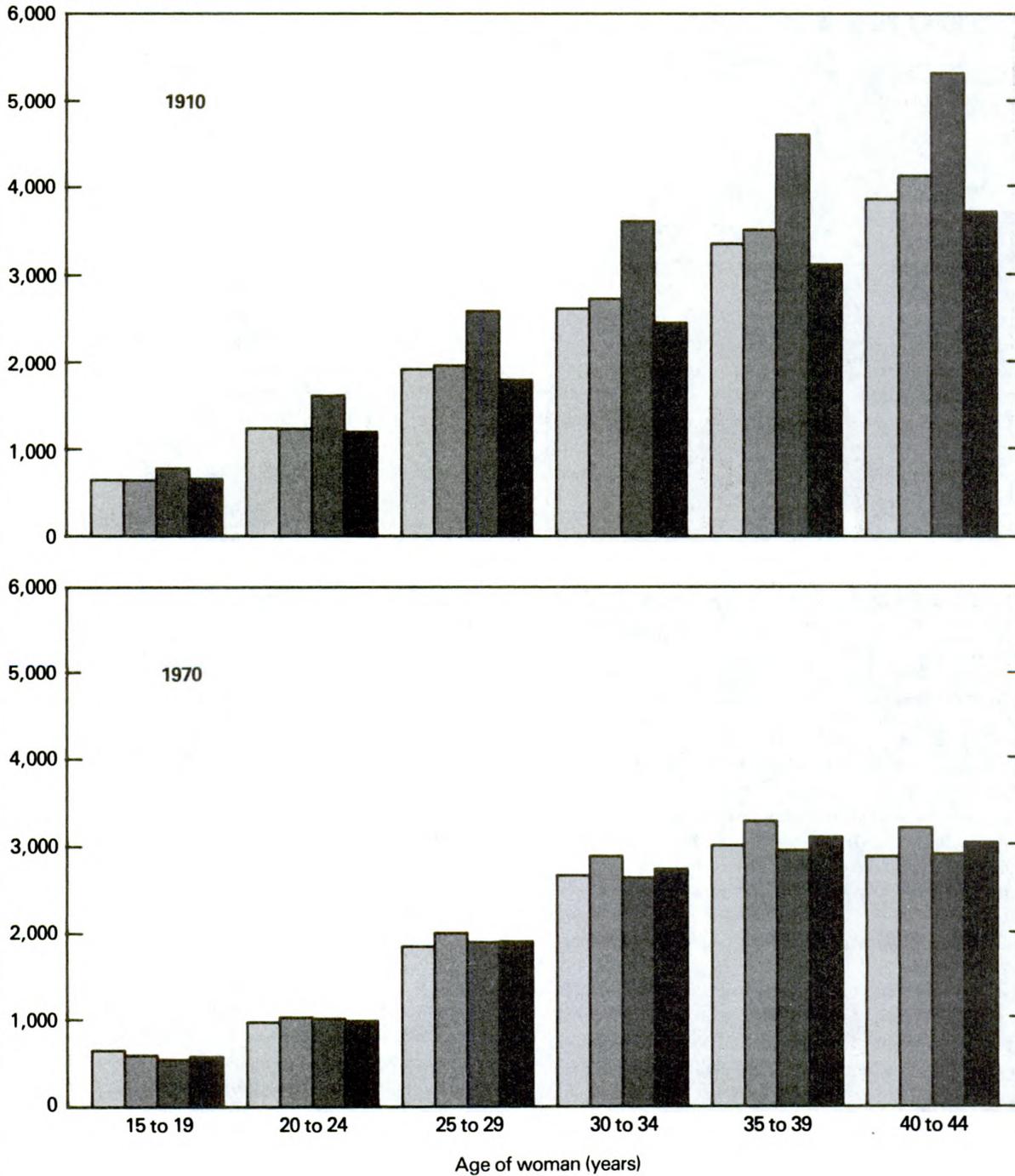
<sup>2</sup> In 1910, the proportion of the population in the Northeast living in urban areas was 72 percent, in the North Central 45 percent, in the South 23 percent, and in the West 48 percent. The respective figures for 1970 were 80, 72, 65, and 83 percent. These figures are from U.S. Bureau of the Census, *1970 Census of Population*, Vol. 1, Characteristics of the Population, Part 1, U.S. Summary, Section 1, table 18.

FIGURE 4-1

**Children Ever Born Per 1,000 White Women Ever Married, by Region of Residence: 1910 and 1970**



Children ever born per 1,000 women



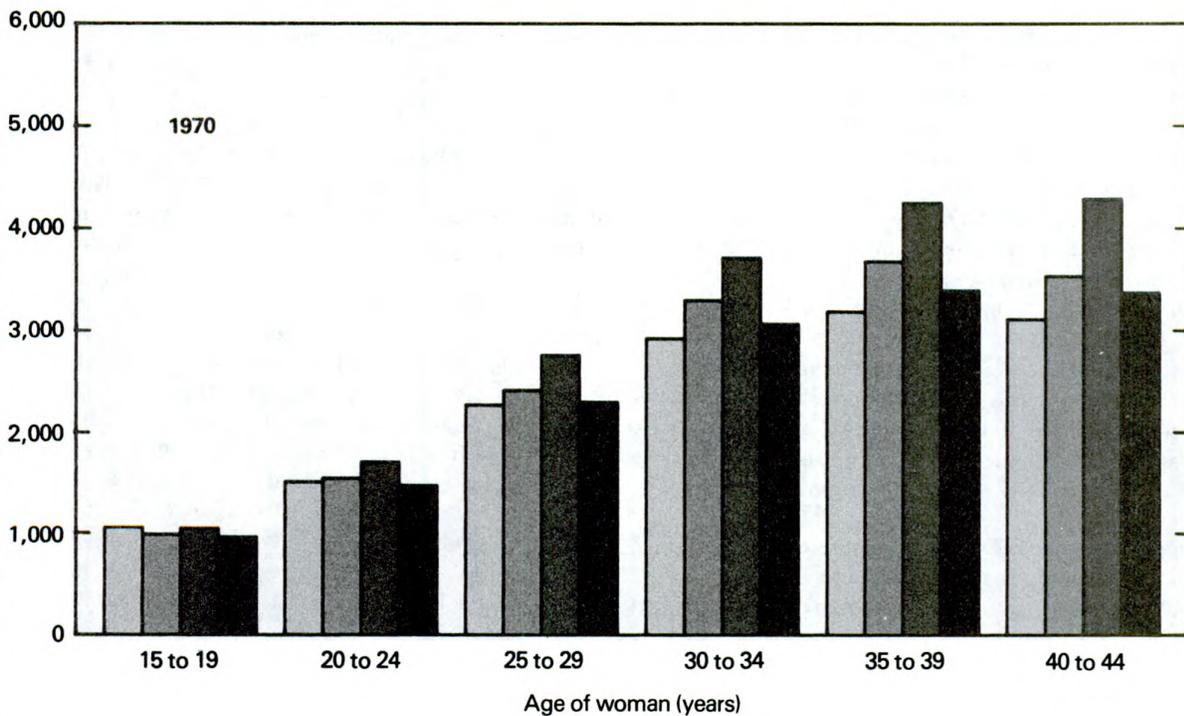
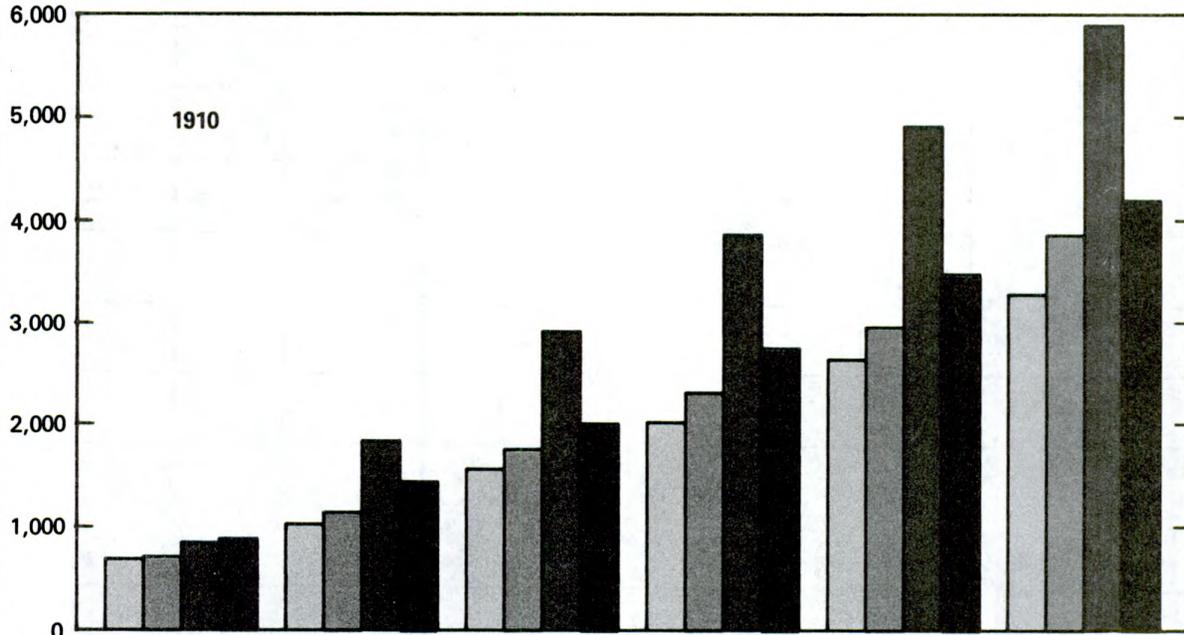
Source: See appendix A.

FIGURE 4-2

**Children Ever Born Per 1,000 Black Women Ever Married, by Region of Residence: 1910 and 1970**



Children ever born per 1,000 women



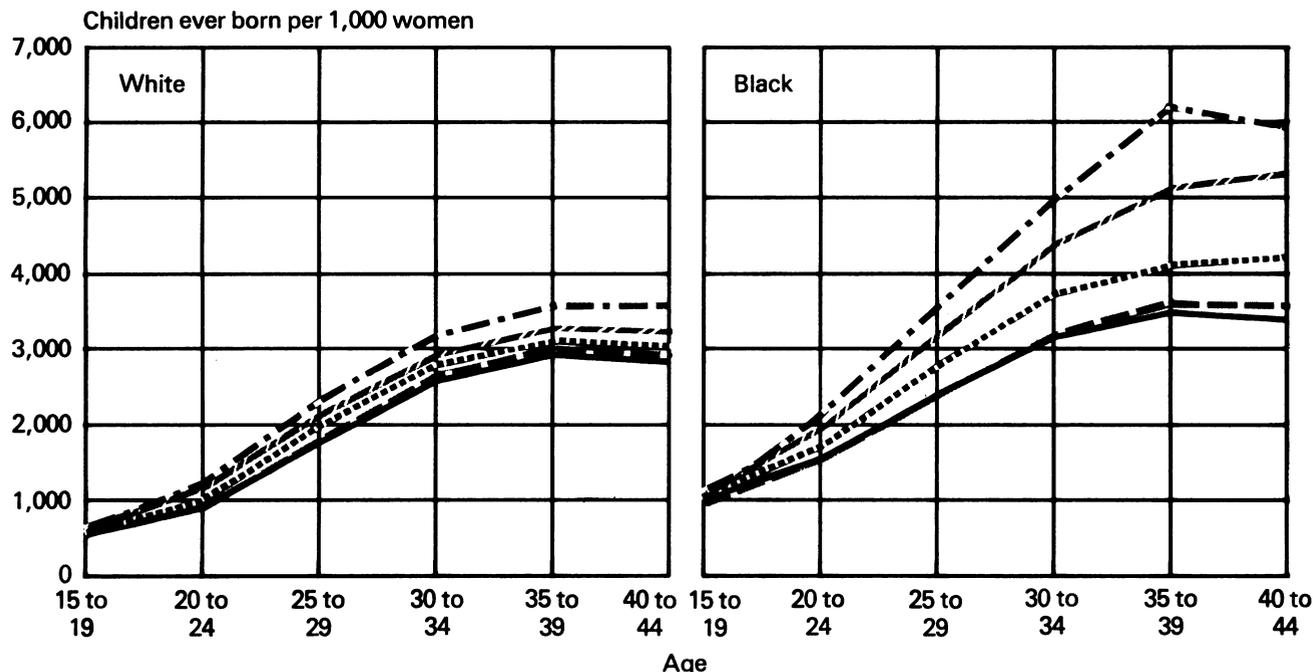
NOTE: In 1910, Black included other races.

Source: See appendix A.

FIGURE 4-3

Children Ever Born Per 1,000 Women Ever Married, by Urban-Rural Residence: 1970

- Central cities
- - - Urban fringe
- ..... Other urban
- · - Rural non-farm
- · · Rural farm



Source: See appendix A.

As shown in chapter 1, fertility declined markedly in the United States throughout the 19th century. Table 4-1 further illustrates this decline from 1800 to 1910 in the several different census divisions by urban and rural residence using the child-woman ratio (the number of children under 5 years of age per 1,000 women 20 to 44 years old).

Economic forces have been suggested as playing a major role in the decline in fertility throughout the 1800's in both urban and rural areas of the Nation. As the population on the East coast increased, a reduction in the available cultivable land per household acted as an incentive to restrict fertility among young couples. Children were more of an economic advantage, however, on larger tracts of land in the "frontier" areas which required a great deal of labor rather than on smaller tracts of land or newly urbanizing areas.<sup>3</sup> As a result, the older sections of the country (the New England, Middle Atlantic, and South Atlantic States) had considerably lower fertility than the sparsely settled East and West Central States.

In addition to economic pressures restricting fertility in older farm areas, the process of urbanization and industrialization in older urban areas may have prompted the diffusion of more "urbane" life styles favoring a reduction in child-bearing. Markets in more urban areas may have offered a wider selection of consumer goods to compete with child-bearing and may have acted as an incentive to restrict

fertility in order to attain a higher standard of living. In the more recently settled urban areas where consumer markets were of a more limited nature, the hypothetical trade-off between bearing children and purchasing goods may well have been in favor of childbearing.

Table 4-1 shows that considerable declines in fertility in rural areas accompanied fertility declines in urban areas during the 19th century. Between 1810 and 1910, fertility declined by 48 percent in urban areas and 41 percent in rural areas. This decline in rural fertility played a significant role in the decline in fertility in the United States because the majority of the population living in the United States during the 19th century resided in rural areas.<sup>4</sup>

Although interregional differences in levels of fertility have been narrowing, patterns of differential fertility still appear on a State-by-State basis. Figure 4-4 shows the general fertility rate (the number of births per 1,000 women 15 to 44 years old) by State for 1970. The highest fertility rates were located in the Sunbelt States of the South and Southwest while the lowest rates were in the New England and Middle Atlantic States. A western State which has shown a consistently high fertility rate is Utah which contains a large Mormon population whose traditional religious values have been adverse to fertility control practices.<sup>5</sup>

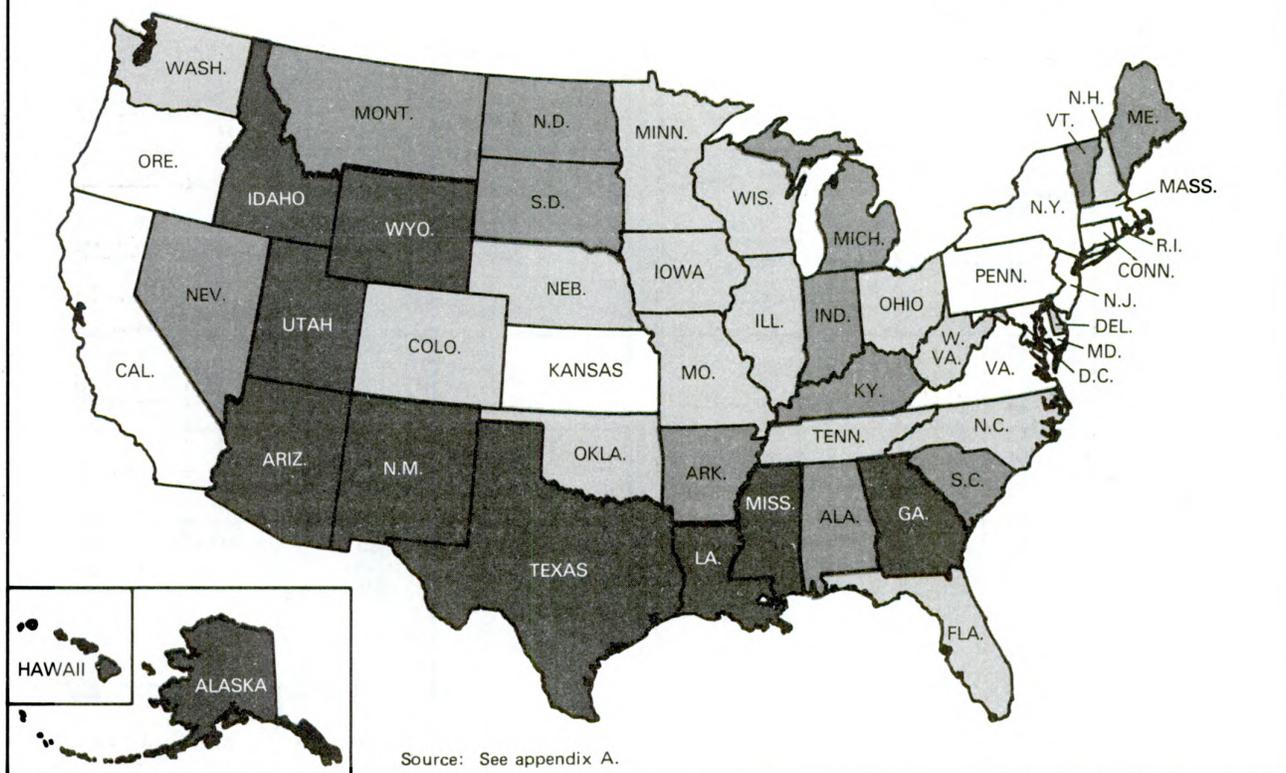
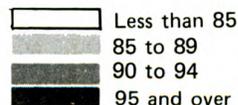
<sup>4</sup> See Wilson H. Grabill, Clyde V. Kiser, and Pascal K. Whelpton, *The Fertility of American Women* (New York: Wiley, 1958), pp. 16 and 17.

<sup>5</sup> For fertility estimates of the Mormon population, see Judith C. Spicer and Susan O. Gustavus, "Mormon Fertility Through Half a Century: Another Test of the Americanization Hypothesis," *Social Biology*, Vol. 21, No. 1 (Spring 1974), pp. 70-76.

<sup>3</sup> For a more complete exposition of this topic, see Richard A. Easterlin, "Does Human Fertility Adjust to the Environment?" *American Economic Review, Papers and Proceedings*, Vol. 61 (May 1971), pp. 399-407.

FIGURE 4-4

**General Fertility Rate, by State: 1970**  
(Births per 1,000 Women 15 to 44 years old)



Source: See appendix A.

**Fertility Differences by Educational Status**

One of the most important socioeconomic factors determining variations in fertility is the educational attainment of the woman. An important direct effect of substantial educational attainment on fertility is the postponement of marriage and entrance into motherhood. The educational process and its subsequent contacts also impart a system of values to the woman which affect her desires regarding family size. The amount of education a woman receives may also be an indication of the values given to her by her parents.

Differences in levels of fertility according to the educational attainment of ever-married women are shown in figure 4-5. Among both White, and Black women, the general rule is that fertility tends to be lower as the level of educational attainment is higher. For all women with a high school education or less, White women have consistently lower fertility than Black women in each age group and in each educational level. Black women with at least 1 year of college education, however, generally have lower fertility rates than White women of the same educational level.

As previously mentioned, a large part of the association between fertility and educational attainment, at least for women in their twenties, can be explained by the fact that women who attend school longer have, on the average, been married for shorter periods of time and thus have had less time to bear children within marriage. The following table

clearly shows the wide disparity in the average number of years since first marriage for currently married White women and Black women 25 to 29 years old in 1970 who were married only once.

**Average Number of Years Since First Marriage for Women 25 to 29 Years Old in 1970**

Years of school completed	White	Black
Less than 8 years.....	8.1	8.1
8 years.....	8.8	8.3
9 to 11 years.....	8.9	8.0
12 years.....	7.1	6.7
13 to 15 years.....	6.0	6.0
16 years or more.....	4.6	4.7

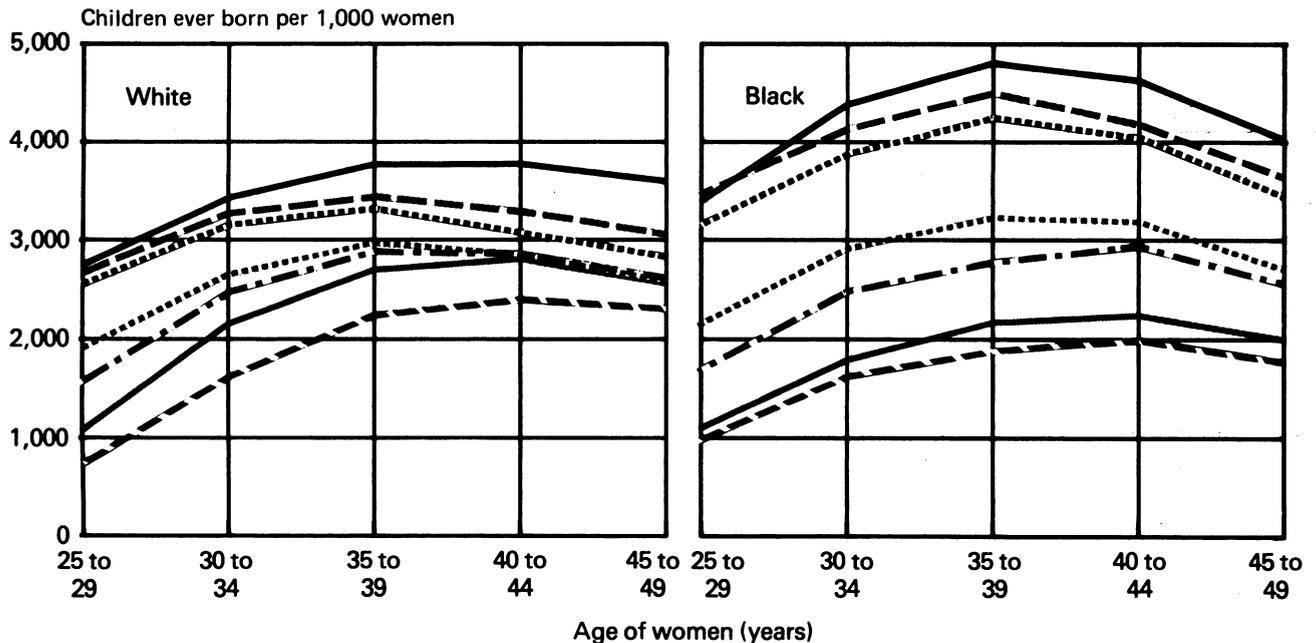
The data show that in general as education increases, the average number of years married declines; this relationship directly effects a woman's eventual completed fertility. Women with less than an elementary school education have about 3 or 4 more years of married life than those with a college degree; this finding is true for both White and Black women.

A catch-up period in childbearing does occur, however, for those women who married at a later age because of a prolonged educational career. Through the data in table

FIGURE 4-5

**Number of Children Ever Born Per 1,000 Women Ever Married, by Years of School Completed: 1970**

- Less than 8 yrs.
- - - 8 yrs.
- ..... 9-11 yrs.
- ..... 12 yrs.
- - - 13-15 yrs.
- 16 yrs.
- - - 17 or more yrs.



Source: See appendix A.

4-2, an attempt is made to measure the extent of this catch-up period after age 25 when most of a woman's schooling has been completed. Columns 2 and 3 in table 4-2 show data on the number of children born per 1,000 ever-married women for the cohort of women who were 25 to 29 years old in 1950 and 45 to 49 years old in 1970 by educational status as recorded in each of the two census. Although the cohorts at the two dates are not exactly comparable because of mortality losses over time, continuing education in the interim, and the subsequent additions due to marriages after 1950, the data indicate that women with some college education have higher fertility after age 25 than do women with no college education. Despite the large increase in fertility during the 1950-70 period for women who had some college education, these women still ended their reproductive lives with levels of childbearing well below those of women who did not complete high school.

**Variations in Fertility by Income and Employment Status**

An analysis of economic statistics in relation to fertility is complicated because some factors which affect one's ability to earn an income also tend to be closely related to the level of fertility (for example, race and education). While higher incomes may afford more resources to bear and raise children, this higher income attained through the labor force participation of the wife restricts her available time to care for children, producing an inhibiting effect on fertility.

Table 4-3 shows the variations in fertility for both White and Black women by employment status. For each age group, women not in the labor force have considerably higher levels of fertility than women in the labor force. Even among women in the labor force, a considerable amount of variation is recorded. Employed women have lower fertility rates than unemployed women and full-time workers have lower fertility rates than part-time workers. For White women, the fertility of the youngest age group not in the labor force is more than twice the fertility of women in the labor force. By age 40 to 44, the level of fertility of women not in the labor force is only about 20 percent higher than that of women in the labor force. The narrowing of this differential is to be expected since most of the children of the older women were born some 15 to 20 years before; therefore, these women generally do not have the constraints of looking after young children as do younger women. Among Black women, however, a rather constant difference in the fertility rate appears (col. 8) between women in different labor force statuses.

A possible explanation for the differences in fertility by race can be traced to the proportions of currently married White and Black women. In 1970, approximately 90 percent of all ever-married White women between the ages of 20 and 44 were currently married and had a husband present, whereas only two-thirds of ever-married Black women in the same age range were in the same marital status (see tabulation below).

The higher proportion of White rather than Black women who were living with their husband during their prime

childbearing years may have permitted more of the White women to leave the labor force when having a child; this may have resulted in the relatively large fertility difference by labor force status and race for women in their twenties.

**Percent of Ever-Married Women Who Are Currently Married, Husband Present: 1970**

Age	White	Black
20 to 24 years.....	87	71
25 to 29 years.....	90	69
30 to 34 years.....	90	67
35 to 39 years.....	89	66
40 to 44 years.....	88	63

Variations in the level of fertility by family income and labor force status of the wife are presented in table 4-4. The 40-to-44-year-old age group was chosen to represent women who are at the end of their childbearing years. Among wives in the labor force, the fertility rate tends to be lower as income increases. However, for women not in the labor force, a U-shaped fertility curve is found; the lowest fertility is recorded for families in the middle-income categories.

Other research has shown that fertility tends to increase as income rises once other factors such as education, age at first marriage, and contraceptive knowledge are taken into account.<sup>6</sup> Given the high cost of rearing a child today, an underlying positive relationship between economic resources and fertility is what would be expected. It has been estimated that the current amount a middle-income family would have to spend to rear a child from birth through 4 years of college in a State university would be \$64,000. This figure does not include the income losses involved in a woman's limiting her potential working life in order to stay at home and care for the child. These additional losses could amount to another \$43,000 for a woman college graduate who has a child today.<sup>7</sup>

<sup>6</sup>See U.S. Bureau of the Census, *Current Population Reports, Series P-23, No. 49, "Population of the United States, Trends and Prospects:1950-1990,"* pp. 37-38, and Richard A. Easterlin, "Towards a Socio-Economic Theory of Fertility: A Survey of Recent Research on Economic Factors in American Fertility," in S. J. Behrman, Leslie Corsa, and Ronald Freedman, eds., *Fertility and Family Planning: A World View* (Ann Arbor: University of Michigan Press, 1969), pp. 127-156.

<sup>7</sup>Thomas J. Espenshade, "The Value and Cost of Children," *Population Reference Bureau Bulletin, Vol. 32, No. 1* (Washington: Population Reference Bureau, 1977).

TABLE 4-1

**Number of Children Under 5 Years Old Per 1,000 White Women 20 to 44 Years Old,  
by Census Division and Urban-Rural Residence, for Selected Years: 1800 to 1910**

(Urban-rural classification by 1940 census rules. For meaning of symbols, see page IX)

Area	1910	1840	1830	1820	1810	1800
United States <sup>1</sup> .....	609	1,070	1,134	1,236	1,290	1,281
Urban.....	469	701	708	831	900	845
New England.....	468	592	614	764	845	827
Middle Atlantic.....	495	711	722	842	924	852
South Atlantic.....	485	770	767	881	936	861
East North Central.....	470	841	910	1,059	1,256	...
East South Central.....	469	859	863	1,089	1,348	...
West North Central.....	426	705	1,181	...	...	...
West South Central.....	504	846	877	866	727	...
Rural.....	782	1,134	1,189	1,276	1,329	1,319
New England.....	566	800	851	952	1,079	1,126
Middle Atlantic.....	650	1,006	1,100	1,235	1,344	1,339
South Atlantic.....	894	1,185	1,209	1,310	1,347	1,365
East North Central.....	672	1,291	1,484	1,616	1,706	1,840
East South Central.....	922	1,424	1,529	1,635	1,701	1,799
West North Central.....	760	1,481	1,703	1,685	1,810	...
West South Central.....	977	1,495	1,463	1,522	1,557	...

<sup>1</sup>Includes Mountain and Pacific Divisions in 1910.

Source: See appendix A.

TABLE 4-2

**Number of Children Ever Born Per 1,000 Women Ever Married  
25 to 29 Years Old in 1950 and 45 to 49 Years Old in 1970, by Years of School Completed**

Race and years of school completed (1)	Children per 1,000 women		Increase from 1950 to 1970	
	1950 (2)	1970 (3)	Children per 1,000 women (4)	Percent increase (5)
<b>WHITE</b>				
Total.....	<sup>1</sup> 1,620	2,777	1,157	71.4
Less than 8 years.....	2,364	3,610	1,246	52.7
8 years.....	1,945	3,092	1,147	59.0
9 to 11 years.....	1,805	2,845	1,040	57.6
12 years.....	1,415	2,601	1,186	83.8
13 to 15 years.....	1,277	2,629	1,352	105.9
16 years or more.....	1,055	2,504	1,449	137.3
<b>BLACK<sup>2</sup></b>				
Total.....	<sup>1</sup> 1,932	3,393	1,461	75.6
Less than 8 years.....	2,359	4,037	1,678	71.1
8 years.....	2,029	3,687	1,658	81.7
9 to 11 years.....	1,938	3,458	1,520	78.4
12 years.....	1,361	2,753	1,392	102.3
13 to 15 years.....	1,204	2,571	1,367	113.5
16 years or more.....	905	1,932	1,027	113.5

<sup>1</sup>Total includes women not reporting on years of school completed.

<sup>2</sup>Black and other races in 1950.

Source: See appendix A.

TABLE 4-3

**Number of Children Ever Born Per 1,000 Women Ever Married, by Employment Status: 1970**

Race and age	Total women ever married (1)	In the labor force					Not in the labor force (7)	Ratio column 7 to column 2 (8)
		Total (2)	Employed			Unemployed (6)		
			Total (3)	Full time (4)	Part time (5)			
<b>WHITE</b>								
20 to 24 years.....	998	628	607	545	792	918	1,343	2.139
25 to 29 years.....	1,918	1,466	1,438	1,310	1,731	1,948	2,210	1.508
30 to 34 years.....	2,733	2,392	2,370	2,238	2,613	2,815	2,959	1.237
35 to 39 years.....	3,086	2,796	2,781	2,659	3,009	3,135	3,326	1.190
40 to 44 years.....	3,007	2,740	2,729	2,616	2,969	3,013	3,273	1.195
<b>BLACK</b>								
20 to 24 years.....	1,627	1,404	1,367	1,308	1,548	1,673	1,882	1.340
25 to 29 years.....	2,536	2,196	2,157	2,084	2,424	2,643	2,983	1.358
30 to 34 years.....	3,390	3,028	2,990	2,885	3,341	3,543	3,904	1.289
35 to 39 years.....	3,822	3,420	3,376	3,248	3,718	4,096	4,455	1.303
40 to 44 years.....	3,817	3,419	3,374	3,254	3,732	4,211	4,433	1.297

Source: See appendix A.

TABLE 4-4

**Children Ever Born Per 1,000 Wives 40 to 44 Years Old,  
by Family Income in 1969 and Labor Force Status in 1970**

Race and income	40 to 44 years old	
	In the labor force	Not in the labor force
<b>WHITE</b>		
Total.....	2,786	3,270
Less than \$4,000.....	2,937	3,620
\$4,000 to \$6,999.....	2,962	3,394
\$7,000 to \$9,999.....	2,854	3,177
\$10,000 to \$14,999.....	2,769	3,219
\$15,000 to \$24,999.....	2,757	3,297
\$25,000 or more.....	2,681	3,214
<b>BLACK</b>		
Total.....	3,537	4,437
Less than \$4,000.....	4,281	5,079
\$4,000 to \$6,999.....	3,806	4,425
\$7,000 to \$9,999.....	3,640	4,090
\$10,000 to \$14,999.....	3,385	4,173
\$15,000 or more.....	3,111	4,342

Source: See appendix A.

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## Chapter 5.

# Pregnancy and Childbearing Outside Marriage

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### Increase in Illegitimate Births, 1940 to 1975

In the 35 years from 1940 to 1975, the annual number of births reported as occurring outside marriage more than quintupled, going from 90,000 in 1940 to 448,000 in 1975 (figure 5-1).<sup>1</sup> Paralleling this rise, the annual percentage of all births classified as illegitimate quadrupled, going from 3.6 percent to 14.3 percent during the same period (table 5-1). In contrast, the number of single women 14 to 44 years old increased by only 39 percent from 12.4 million in 1940 to 17.2 million in 1975.<sup>2</sup> Although a birth may be classified as illegitimate if the mother is widowed or divorced, most illegitimate births occur to women who have never been married.<sup>3</sup> Clearly, there has been a rise in illegitimacy out of proportion to the numbers of single women in the population.

The increase in annual numbers of illegitimate births to Black women was almost continuous from 1940 to 1975.<sup>4</sup> The same is generally true for White women as well, al-

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<sup>1</sup> Numbers of illegitimate births and illegitimacy rates shown in this report are those published in *Vital Statistics of the United States*. In this source no corrections are made for underregistration of births or underenumeration of unmarried women. For data including corrections for assumed rates of underregistration and underenumeration as well as for a discussion of the accuracy of recording illegitimate births, see Phillips Cutright, "Illegitimacy in the United States: 1920 to 1968," in U.S. Commission on Population Growth and the American Future, Research Reports, Vol. 1, *Demographic and Social Aspects of Population Growth*, Charles F. Westoff and Robert Parké, Jr. (eds.), (Washington, D.C., U.S. Government Printing Office 1972) pp. 375-438.

<sup>2</sup> The number of single women 14 to 44 years old declined to 9.1 million in 1953. Thereafter it rose annually and should reach a peak in the late 1970's before declining once again. Widowed and divorced women are also included in the bases upon which illegitimacy rates are calculated.

<sup>3</sup> For a discussion of illegitimacy among married women, see James E. Dele and William M. Schmidt, "Illegitimacy and Race: National and Local Trends," *Milbank Memorial Fund Quarterly*, Vol. 48, No. 2 (1970), pp. 127-144.

<sup>4</sup> Data for Blacks shown in figures 5-1 and 5-2 and in table 5-1 include persons of all races other than White, except where noted. In 1975, Black women constituted about 90 percent of all single women of races other than White in the childbearing years of 15 to 44.

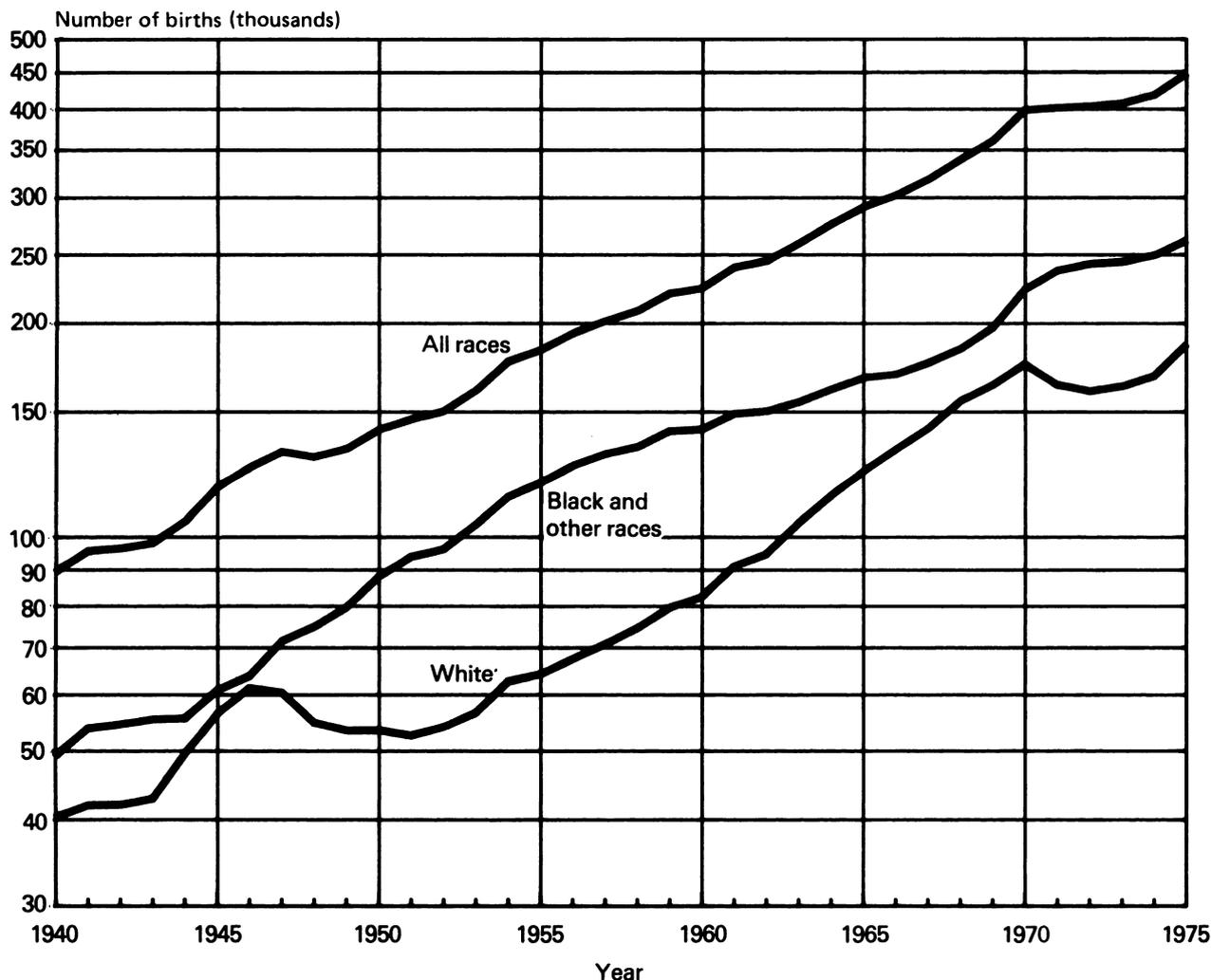
though the years around 1950 and the early 1970's did show some decline in reported illegitimacies. Interestingly enough, the 1970 to 1972 drop in illegitimate births among Whites and the slowdown among Blacks occurred just after three States—Alaska, Hawaii, and New York—enacted liberalized abortion laws which no longer specified reasons for the performance of an abortion. On the other hand, the numbers of illegitimate births have increased since then, even though the 1973 *Roe v. Wade* decision of the U.S. Supreme Court invalidated the restrictive abortion laws of most States.

The increase in the absolute numbers of illegitimate births is not the only aspect of importance during the 1940-75 period; illegitimacy rates also increased substantially after 1940. However, since 1970, the illegitimacy rates have generally been declining for White women; the same has been true for Black women since 1961 (figure 5-2). The fact that the number of illegitimate births has not declined reflects the fact that the number of women who could bear an illegitimate child has been increasing rapidly throughout the 1960's and 1970's as the "baby boom" children enter their reproductive years.

The age-specific rates of illegitimacy charted in figure 5-3 (also see table 5-2) show the underlying basis for the explosion in the numbers of illegitimate births. For all 5-year age groups from 15 to 44 years, the rates of illegitimacy rose from the 1940's through the mid-1960's; for the age groups between 20 and 34, the rise was especially sharp. With the exception of women 15 to 19 years old, the rates began to decline by 1965 or 1966, although they have remained at much higher levels than those observed in the early 1940's. For women 15 to 19 years old, the most crucial age group in accounting for illegitimate births, the rate actually increased by 60 percent from 1962 to 1975. There were 5.5 million single women in this age group in 1960; in 1975 there were 9.1 million, an increase of 65 percent. Prior to 1970, women 15 to 19 years old had less than half of all illegitimate births. By 1975, as a result of decreasing illegitimacy rates at older ages and increasing

FIGURE 5-1

**Number of Illegitimate Births:  
1940 to 1975**



Source: See appendix A.

rates among women 15 to 19 years old, teenage women accounted for more than half of all illegitimate births.<sup>5</sup>

The percentage of all births that are illegitimate, which rose from 4 percent in 1940 to 14 percent in 1975 (table 5-1), depends not only on the rates of illegitimacy, but also on rates of legitimate births. The general rate of illegitimacy among women 15 to 44 years old has declined in recent years after reaching a high in 1970. Since 1970, however, rates and numbers of legitimate births have been dropping

<sup>5</sup> Recently released data based on birth registrations show fertility rates separately for women 15 to 17 years old and 18 and 19 years old, for the years 1966 through 1975. Illegitimacy rates for women 15 to 17 years old rose steadily throughout the period from 13.1 per 1,000 unmarried women in 1966 to 19.5 in 1975. Illegitimacy rates for those 18 and 19 years old increased from 25.8 in 1966 to 32.9 in 1970. Rates for this latter group then declined for 3 years thereafter but rose again in 1974 and stood at 32.8 in 1975. See National Center for Health Statistics, *Monthly Vital Statistics Report*, Vol. 26, No. 5, "Teenage Childbearing: 1966-1975," table 4.

even more rapidly. The result is that, with the numbers of legitimate births decreasing and the numbers of illegitimate births increasing, the proportion of all births which are illegitimate has increased even more rapidly since 1965 than has the annual number of illegitimate births.

The drop in illegitimacy rates among women 20 to 44 years old, which began in the early 1960's, is due in part to the use of more effective contraceptives and their greater practical availability to single women. The fact that rates among teenagers have not dropped but have continued to rise may well reflect both poorer understanding and use of contraceptives as well as restricted accessibility to them.<sup>6</sup>

<sup>6</sup> For a discussion of the failure of teenage women to use contraceptive methods, see Farida Shah, Melvin Zelnik, and John F. Kantner, "Unprotected Intercourse Among Unwed Teenagers," *Family Planning Perspectives*, Vol. 7, No. 1 (January/February 1975), pp. 39-44.



U.S. Department of Commerce  
BUREAU OF THE CENSUS

Series P-23, No. 70  
Issued August 1978

## Perspectives on American Fertility

### Errata Sheet

Figure 5-2 on page 41 of Perspectives on American Fertility erroneously shows data for White women 15 to 19 years old instead of White women 15 to 44 years old. The chart below should replace that in the printed report.

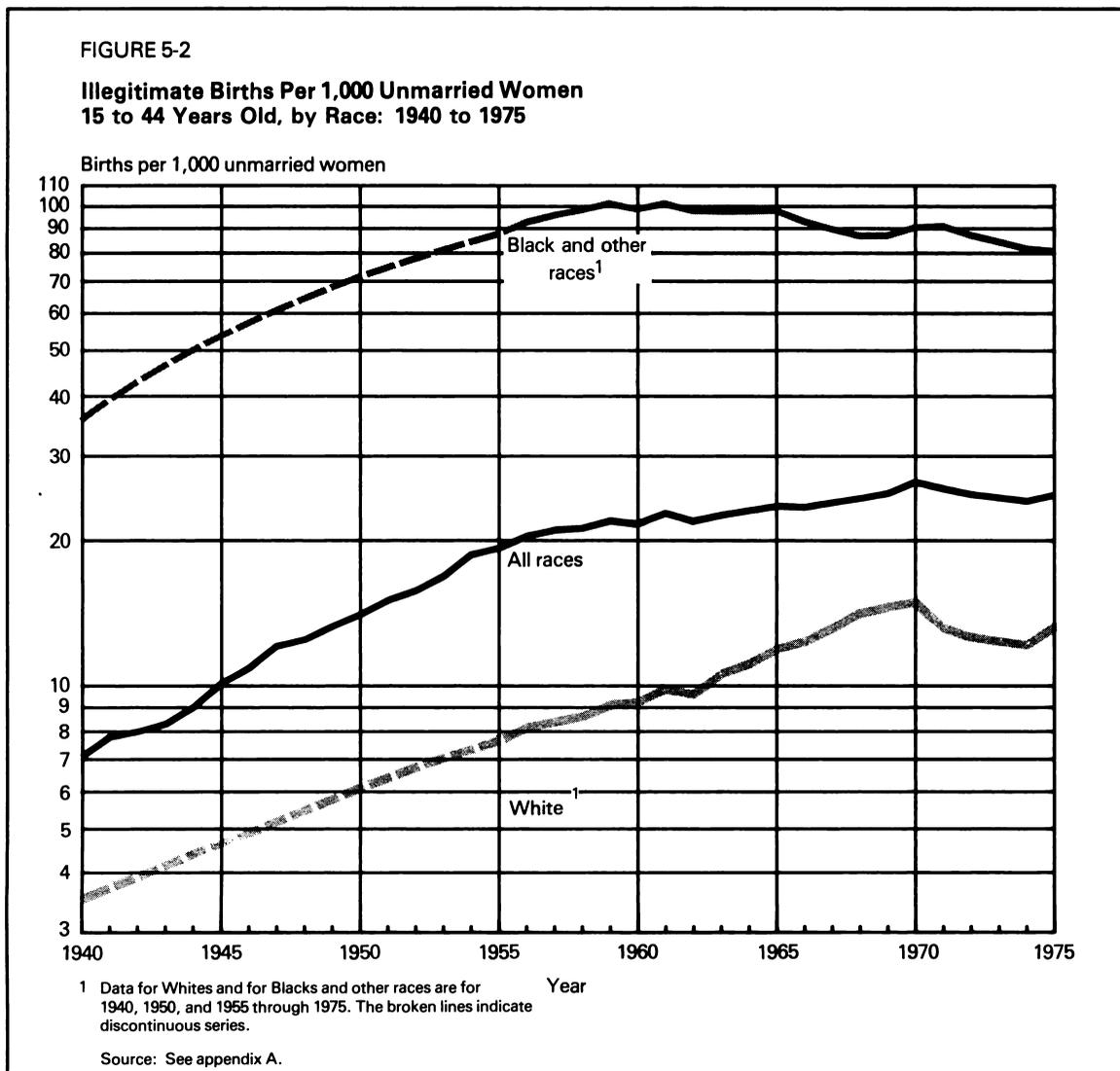
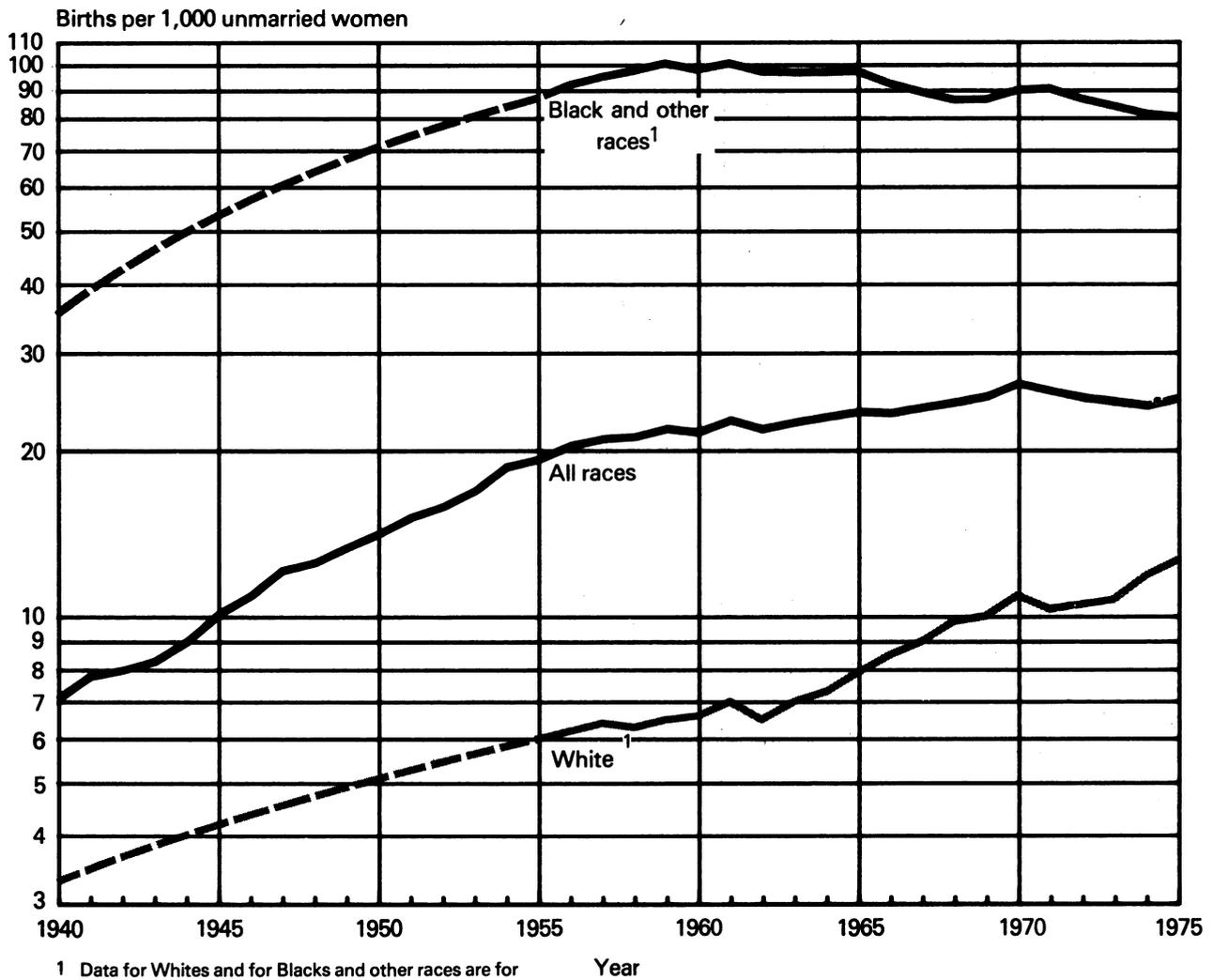


FIGURE 5-2

**Illegitimate Births Per 1,000 Unmarried Women  
15 to 44 Years Old, by Race: 1940 to 1975**



<sup>1</sup> Data for Whites and for Blacks and other races are for 1940, 1950, and 1955 through 1975. The broken lines indicate discontinuous series.

Source: See appendix A.

There is some reason to believe that the absolute numbers of illegitimate births may soon increase more slowly or even decrease. The number of young women 15 to 19 years old reached a peak in 1976 and is projected to decline for at least the next 15 years as "baby boom" children are replaced by those born during the more recent years of declining fertility. As has been pointed out above, it is women 15 to 19 years old who bear more than half the illegitimate births each year. Unfortunately, it is not possible to predict whether or not the illegitimacy rate among teenage women will level off and eventually begin to decline. Much depends on the underlying reasons for teenage illegitimacy and how susceptible the causes are to social and other remedies.

**Legitimate Births Conceived Outside Marriage**

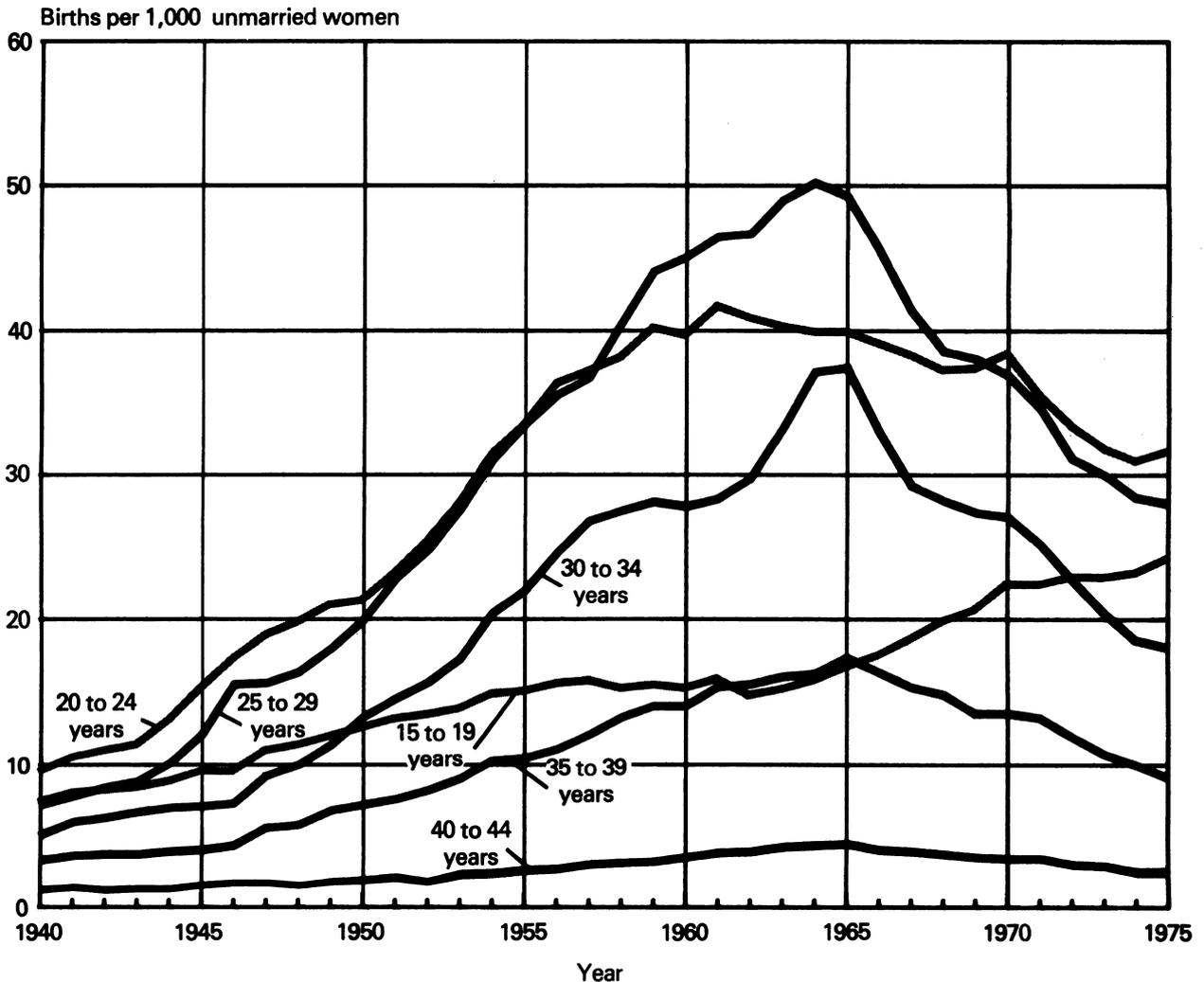
Many children conceived outside of legal marriages are recorded as having been born "legitimately." This occurs

when the premarital conception is legitimated by marriage during the pregnancy. Since birth registrations contain no information on date of marriage, this data source provides no estimate of the extent to which premarital conceptions are subsequently legitimated prior to the birth of the child. However, information regarding women's marriage and birth histories was collected in the June 1975 Current Population Survey (CPS). These data make possible some estimation of first births conceived before marriage for women who had ever been married at the time of the survey.

Among White women first married in 1970 to 1974, about 1 in 5 reported dates of first marriage and first child-bearing which imply that the first child was conceived before marriage (table 5-3). This percentage is twice as high as that among women first married in 1940 to 1944; this finding applies to births which occurred before the mother's first marriage as well as to those premaritally

FIGURE 5-3

**Illegitimate Births Per 1,000 Unmarried Women,  
by Age: 1940 to 1975**



Source: See appendix A.

conceived but which were "legitimated" by a subsequent marriage. Among White women, two to three times as many premaritally conceived children are born within marriage as outside of it.

Among Black women first married in the years 1960 to 1974, half or more of their first children were conceived before marriage, about a 30 to 35 percent increase over the corresponding percentage for women first married in the 1940's (table 5-3). The large majority of first children conceived out of wedlock by Black women, unlike those conceived out of wedlock by White women, were also born before first marriage.

About 6 percent of White women first married in 1970 to 1974 became mothers before marrying. This percentage is higher than that for any other marriage cohort of White

women since at least 1940 to 1944 (table 5-3). On the other hand, the percentage of women with a premaritally conceived child born within a subsequent marriage seems to be down somewhat for those first married 1970 to 1974 in comparison with White women first married in the 1960's. The large sampling variability associated with the estimates for Black women do not permit assessment of the differences recorded for the marriage cohorts from 1960 to 1974.

**Social Differences  
Associated with Premarital  
Childbearing**

Data from the June 1976 CPS (table 5-4) indicate that about 5 percent of White single women 18 to 44 years old had ever

had a child.<sup>7</sup> However, among single White women 30 to 44 years old in 1976, the percentage of women having one or more children was about twice the overall average, whereas among single White women 18 and 19 years old, the percentage was about half the general average. About 64 percent of Black single women 30 to 44 years old reported having one or more children, as did 23 percent of those 18 and 19 years of age. The proportion of single women 18 to 44 years old with two or more children is about 2 percent among White women and 21 percent among Black women.

Average numbers of illegitimate births per woman also

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<sup>7</sup>There is the likelihood of some deliberate misreporting of the facts with respect to the fertility of single women, especially among those who perceive out-of-wedlock childbirth as bearing a social, moral, or legal stigma. It is also possible that the level of misreporting differs systematically according to various demographic and social characteristics. For an assessment of the reliability of these data, see Maurice J. Moore, "Asking Single Women About Their Children: The Census Bureau's Experience," *Proceedings of the Social Statistics Section 1976*, (Washington, D.C.: American Statistical Association, 1976), pp. 618-623.

vary widely by age and race. Highest averages are recorded among single women in the 30 to 44 age group, where, it should be noted, there are relatively few women remaining single. White women in this age group averaged 208 births per 1,000 single women; the corresponding average for Black women was 1,953. Among 18-and-19-year-old-single women, the average per 1,000 White single women was 27; the average for Black women was 296.

The data of table 5-5 show that less-educated women have a much higher average number of illegitimate children than do better-educated women. Also, women not in the labor force at the time of the survey had higher averages than did those in the labor force. The fact that average numbers of illegitimate births are especially high among women who did not graduate from high school is probably due in some measure to women dropping out of school after becoming pregnant to bear and care for their babies. Thus, for many women, having an illegitimate child is a likely cause of lower educational attainment, which in turn may be a factor affecting a woman's subsequent activity in the labor force.

TABLE 5-1

**Numbers of Illegitimate Live Births and Percent Illegitimate Among  
All Live Births: 5-Year Averages, 1940-44 to 1970-74, and Single-Year Data, 1965 to 1975**

Calendar period	Number (thousands)			Percent illegitimate among all live births		
	All races	White	Black <sup>1</sup>	All races	White	Black <sup>1</sup>
1975.....	448	186	250	14.3	7.3	48.8
1970 to 1974.....	406	166	230	12.1	6.1	43.0
1974.....	418	169	239	13.2	6.5	47.1
1973.....	407	163	235	13.0	6.4	45.8
1972.....	403	161	233	12.4	6.0	43.9
1971.....	401	164	229	11.3	5.6	40.5
1970.....	399	175	215	10.7	5.7	37.6
1965 to 1969.....	322	144	179	9.0	4.8	29.4
1969.....	361	164	197	10.0	5.5	32.5
1968.....	339	155	184	9.7	5.3	31.2
1967.....	318	142	176	9.0	4.9	29.4
1966.....	302	133	170	8.4	4.4	27.7
1965.....	291	124	168	7.7	4.0	26.3
1960 to 1964.....	249	98	152	6.0	2.8	23.0
1955 to 1959.....	202	72	130	4.8	2.0	20.9
1950 to 1954.....	155	56	99	4.1	1.7	18.7
1945 to 1949.....	127	57	70	3.8	2.0	17.0
1940 to 1944.....	97	43	54	3.6	1.8	16.8

<sup>1</sup>Prior to 1970, data are for Black and other races.

Source: See appendix A.

TABLE 5-2

**Illegitimate Births Per 1,000 Unmarried Women, by Age:  
5-Year Averages, 1940-44 to 1970-74, and Single-Year Data, 1965 to 1975**

Calendar period	Age of mother						
	Total <sup>1</sup> , 15 to 44 years	15 to 19 years	20 to 24 years	25 to 29 years	30 to 34 years	35 to 39 years	40 to 44 <sup>2</sup> years
1975.....	24.8	24.2	31.6	28.0	18.1	9.1	2.6
1970 to 1974.....	25.1	22.8	34.0	32.2	22.9	11.9	3.1
1974.....	24.1	23.2	30.9	28.4	18.6	10.0	2.6
1973.....	24.5	22.9	31.8	30.0	20.5	10.8	3.0
1972.....	24.9	22.9	33.4	31.1	22.8	12.0	3.1
1971.....	25.6	22.4	35.6	34.7	25.3	13.3	3.5
1970.....	26.4	22.4	38.4	37.0	27.1	13.6	3.5
1965 to 1969.....	24.0	18.6	38.4	42.6	31.1	15.5	4.0
1969.....	25.0	20.6	37.4	38.1	27.4	13.6	3.6
1968.....	24.4	19.8	37.3	38.6	28.2	14.9	3.8
1967.....	23.9	18.6	38.3	41.4	29.2	15.4	4.0
1966.....	23.4	17.5	39.1	45.6	33.0	16.4	4.1
1965.....	23.5	16.7	39.9	49.3	37.5	17.4	4.5
1960 to 1964.....	22.3	15.4	40.5	47.5	31.2	15.5	4.0
1955 to 1959.....	20.8	15.5	37.1	38.1	25.8	12.2	3.0
1950 to 1954.....	16.1	13.6	25.9	25.2	16.3	8.5	2.2
1945 to 1949.....	11.8	10.7	18.5	15.6	9.0	5.3	1.7
1940 to 1944.....	8.0	8.2	11.1	8.5	6.2	3.7	1.3

<sup>1</sup>Rates computed by relating total illegitimate births, regardless of age of mother, to unmarried women 15 to 44 years old.

<sup>2</sup>Rates computed by relating illegitimate births to mothers 40 years old and over to unmarried women 40 to 44 years old.

Source: See appendix A.

TABLE 5-3

**Percentage of Ever-Married Women With First Child Born  
Either Before First Marriage or Within 8 Months After First Marriage: June 1975**

(Data limited to women born since 1900)

Race of mother and period of birth of first child	Year of mother's first marriage						
	1970 to 1974	1965 to 1969	1960 to 1964	1955 to 1959	1950 to 1954	1945 to 1949	1940 to 1944
<b>ALL RACES</b>							
Number of women....(thousands)..	7,845	7,337	6,268	6,062	6,031	6,653	5,711
Percent							
With first child premaritally conceived.....	24.4	25.3	25.0	21.6	16.8	13.8	11.5
And born before first marriage <sup>1</sup> .....	9.5	8.3	8.2	7.6	6.5	5.6	4.7
And born during first 8 months of marriage <sup>2</sup> .....	14.9	17.0	16.8	14.0	10.3	8.2	6.8
<b>WHITE</b>							
Number of women....(thousands)..	6,896	6,426	5,520	5,262	5,337	5,968	5,180
Percent							
With first child premaritally conceived.....	20.9	22.4	21.3	17.7	13.6	10.8	8.9
And born before first marriage <sup>1</sup> .....	6.1	5.1	5.1	4.5	4.2	3.4	2.9
And born during first 8 months of marriage <sup>2</sup> .....	14.8	17.3	16.2	13.2	9.4	7.4	6.0
<b>BLACK</b>							
Number of women....(thousands)..	758	754	645	1,308		1,104	
Percent							
With first child premaritally conceived.....	54.8	51.9	56.4	46.5		40.0	
And born before first marriage <sup>1</sup> .....	37.5	35.1	34.1	28.8		25.2	
And born during first 8 months of marriage <sup>2</sup> .....	17.3	16.8	22.3	17.7		14.8	

<sup>1</sup>Month and year of child's birth is earlier than the month and year of the mother's first marriage

<sup>2</sup>Date of child's birth is neither earlier than the date of the mother's first marriage nor later than 8 months after the marriage. Due to the dating of events in months, a few children born shortly before the mother's marriage may be misclassified as born within marriage. For the same reason, a few who were conceived within marriage and born somewhat prematurely may be erroneously classified as among those premaritally conceived.

Source: See appendix A.

TABLE 5-4

## Children Ever Born to Single Women: June 1976

Race and age	Number of women (thousands)	Number of children ever born (percent distribution)					Children ever born per 1,000 women
		Total	None	1	2	3 or more	
<b>ALL RACES</b>							
18 to 44 years.....	9,925	100.0	88.1	6.9	2.7	2.2	212
18 to 24 years.....	7,472	100.0	91.0	6.3	2.0	0.7	126
18 and 19 years.....	3,286	100.0	94.2	4.8	0.9	0.1	69
20 and 21 years.....	2,266	100.0	91.0	6.0	2.3	0.6	129
22 to 24 years.....	1,920	100.0	85.6	9.3	3.6	1.5	220
25 to 29 years.....	1,351	100.0	80.9	9.8	4.6	4.7	358
30 to 44 years.....	1,102	100.0	77.3	7.6	5.1	10.1	618
45 to 59 years.....	769	100.0	92.6	3.1	1.6	2.7	218
<b>WHITE</b>							
18 to 44 years.....	7,979	100.0	95.1	3.5	1.0	0.5	73
18 to 24 years.....	6,128	100.0	96.2	3.0	0.6	0.1	48
18 and 19 years.....	2,742	100.0	97.4	2.5	0.1	-	27
20 and 21 years.....	1,847	100.0	96.5	2.3	0.9	0.1	48
22 to 24 years.....	1,539	100.0	93.8	4.7	1.2	0.4	84
25 to 29 years.....	1,030	100.0	92.7	5.2	1.1	1.0	109
30 to 44 years.....	822	100.0	89.8	4.6	3.2	2.4	208
45 to 59 years.....	667	100.0	96.0	1.5	1.3	1.2	93
<b>BLACK</b>							
18 to 44 years.....	1,731	100.0	56.0	22.7	10.5	10.8	854
18 to 24 years.....	1,196	100.0	64.7	23.1	8.9	3.3	518
18 and 19 years.....	494	100.0	77.2	17.2	4.6	1.0	294
20 and 21 years.....	363	100.0	62.8	24.2	9.9	3.0	537
22 to 24 years.....	339	100.0	48.5	30.5	14.2	6.8	826
25 to 29 years.....	280	100.0	35.9	27.8	17.4	18.9	1,296
30 to 44 years.....	255	100.0	36.3	16.8	11.3	35.5	1,953
45 to 59 years.....	93	100.0	67.4	15.2	3.3	14.1	1,151

Source: See appendix A.

TABLE 5-5

**Children Ever Born Per 1,000 Single Women,  
by Selected Socioeconomic Characteristics: June 1976**

(Numbers in thousands. For meaning of symbols, see page IX)

Characteristic	18 to 24 years old		25 to 34 years old		35 to 44 years old	
	Number of women	Children ever born per 1,000 women	Number of women	Children ever born per 1,000 women	Number of women	Children ever born per 1,000 women
<b>WHITE</b>						
Total.....	6,128	48	1,420	120	432	266
<b>YEARS OF SCHOOL COMPLETED</b>						
Not a high school graduate.....	890	157	155	548	102	843
High school, 4 years.....	2,707	47	434	141	149	173
College, 1 year or more.....	2,530	10	831	30	183	16
<b>LABOR FORCE STATUS</b>						
In labor force.....	4,791	27	1,233	67	353	178
Not in labor force.....	1,337	123	187	476	79	658
<b>BLACK</b>						
Total.....	1,196	518	405	1,390	130	2,292
<b>YEARS OF SCHOOL COMPLETED</b>						
Not a high school graduate.....	359	930	129	2,484	77	2,429
High school, 4 years.....	544	436	184	1,125	35	(B)
College, 1 year or more.....	294	173	92	424	17	(B)
<b>LABOR FORCE STATUS</b>						
In labor force.....	681	395	266	1,177	79	2,013
Not in labor force.....	516	680	139	1,799	51	(B)

Source: See appendix A.

## Chapter 6.

# Contraception and Abortion

Each year since 1972 has been marked by a new low in the total fertility rate for the United States. Moreover, the total number of births in 1976 was only 4 percent higher than the number in 1921, even though the number of women of childbearing age (ages 15 to 44) in 1976 was almost twice the number in 1921. It is obvious that the Nation's fertility is among the most controlled in the world, and this high level of control is a crucially significant characteristic of the fertility of American women.

### Acceptance and Practice of Contraception

The breadth of acceptance of contraception among married couples in the United States is attested to by the fact that in 1973, 7 out of 10 married women who were 15 to 44 years old reported they were currently using some method of contraception (table 6-1). Since the women not using contraception included those who were pregnant at the time of the interview or who were seeking to become pregnant or who had recently borne a child, an estimated 89 percent of married women "exposed to the risk" of an unplanned pregnancy in 1973 were actually practicing contraception.<sup>1</sup>

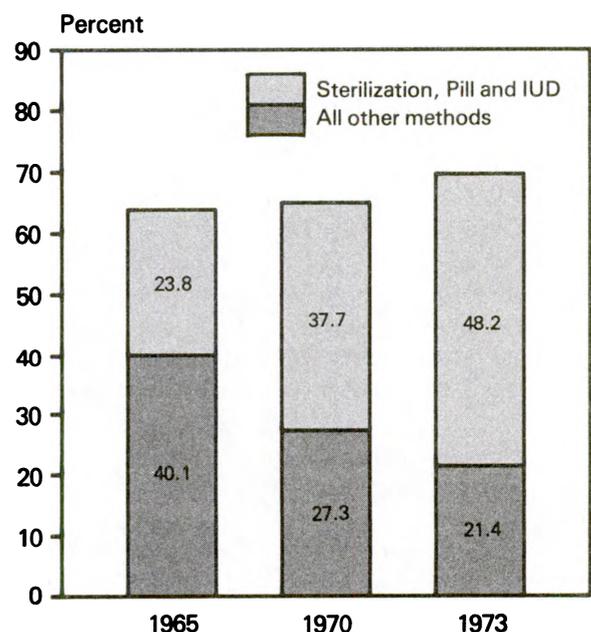
Data from the 1960 GAF study yielded the estimate that 50 percent of married couples with wives in the reproductive years were practicing contraception at the time of the survey.<sup>2</sup> Corresponding estimates from the 1965 and 1970 National Fertility Studies were 64 and 65 percent, respectively. Thus, while the percentage of women currently practicing contraception increased by about 14 percentage points from 50 percent in 1960 to 64 percent in 1965, the increase from 64 percent in 1965 to 70 percent in 1973 was only about 6 percentage points.

Although the increase in current contraceptive usage among married couples was relatively small from 1965 to 1973, there were very important changes in the quality of

the methods used (figure 6-1). In 1965, about 60 percent of wives practicing contraception were using methods other than the effective and "modern" techniques of sterilization, contraceptive pill, and intrauterine device (IUD). By 1973, the situation had reversed, with almost 70 percent of wives practicing contraception using these methods, which were almost unknown before 1960. Thus, it is reasonable to assume that the overall effectiveness of contraception increased significantly between 1965 and 1973. Certainly

FIGURE 6-1

Percent of Married Couples, Wife 15 to 44 Years Old, Using a Contraceptive Method: United States, 1965, 1970, and 1973



Source: See appendix A.

<sup>1</sup> National Center for Health Statistics, *Monthly Vital Statistics Report*, Vol. 25, No. 7, "Contraception Utilization Among Currently Married Women 15-44 Years of Age: United States, 1973," p. 2.

<sup>2</sup> *Ibid.*, p. 1.

changes in the birth rates during that period provide no contradictory evidence.

The percentage of married couples practicing contraception was greater among some subgroups in the population than among others. For example, White wives were more likely to use contraceptives than Black wives, especially among those 30 to 44 years old (table 6-1). Also, women with less than two children born as of the survey date were considerably less likely to be practicing contraception than were women with two or more children already born. Couples with less than two children were more likely than the others to be desiring a pregnancy or to be in the postpartum period following a pregnancy.

The percentage of Catholic women using contraceptives was about 4 percentage points lower than for Protestant women in 1973. Although the difference is statistically significant and in the expected direction, the difference is surprisingly small, given the official position of the Catholic Church against the use of contraception other than periodic abstinence (rhythm). The convergence in the contraceptive practice of Catholics and Protestants, as well as the increasing nonconformity of Catholic couples with the official teaching of their Church, has been detailed in *The Contraceptive Revolution*<sup>3</sup>, which reports on the 1970 National Fertility Survey. A further indication of increasing nonconformity among Catholics is seen in table 6-2, which shows a decline among all three age groups of White women in the use of rhythm as a method of preventing conception.

Information on the particular method of contraception used, according to the wife's race and age, is shown in table 6-2. It has already been noted that relatively fewer Black women than White women use contraceptives. However, except for women 15 to 24 years old in 1965, the percentage of women who use modern methods of contraception (sterilization, pill, and IUD) is almost the same, age for age, among both Blacks and Whites. This means that among women who do practice contraception, the percentage using modern methods is higher among Blacks than Whites. It is also true, for both Black women and White women, that in 1965 and 1973, a greater percentage of younger women used modern methods of contraception than did successively older groups of women (with the exception of Black women 15 to 24 years old in 1965).

The use of each of the modern methods has increased substantially between 1965 and 1973 for each age group and for both races. An interesting racial difference appears in the use of sterilization. Although the percentage of couples protected by sterilization has increased for both races, among Black couples, almost no men have been sterilized whereas, among White couples, almost as many men have been sterilized as women.

### Acceptance of Abortion

Based on the available evidence, contraception appears to be widely accepted as a method of fertility control. Far more controversial at the present time is the use of abortion as a

means of limiting fertility. Since the 1973 Supreme Court ruling which struck down restrictive State laws regarding abortion, especially during the first 3 months of pregnancy, legal abortion has been increasingly available as a means of fertility control when contraception either fails or is not used at all.

Data available from Gallup polls and social surveys conducted by the National Opinion Research Center indicate that Americans have grown increasingly tolerant of abortion for a variety of reasons (table 6-3). In 1977, only 9 percent of persons surveyed expressly disapproved of therapeutic abortions for the sake of the woman's health; the corresponding statistic for 1962 was 16 percent.<sup>4</sup> Only 1 person in 7 in 1977 disapproved of inducing an abortion if there were a danger that the child might be born deformed. However, if the reason for inducing an abortion is that the couple wants no more children, slightly more than half of those in the 1977 survey disapproved of the procedure. About 45 percent disapproved of abortion as a remedy for a couple's inability to support another child.

Although over half of the 1977 sample of persons expressed disapproval of abortion when there was no reason involved other than the desire not to have the child, tolerance for inducing abortion in these circumstances seems to have increased in the past decade. In the 1968 Gallup poll, 85 percent of those polled disapproved of abortion when the only reason would be the desire not to have another child. By 1972, the percentage of respondents expressly disapproving had dropped to 57 percent.

Statistics on legal abortions performed in the United States are collected and published by the Federal Government through the Center for Disease Control (CDC) in Atlanta, Ga. Since 1973, partial or complete data on legal abortions have been reported by each of the 50 States and the District of Columbia. Data used in this report are from the CDC report for 1975. Somewhat more complete reporting on legal abortions is provided by the Alan Guttmacher Institute (AGI), a private research organization. CDC and AGI estimates of the number of legal abortions occurring and the ratios per 1,000 live births for 1973, 1974, and 1975 are shown on the following page.<sup>5</sup>

Assuming that the true number of legal abortions in the United States is no less than that published by the Alan Guttmacher Institute, there was almost exactly 1 legal abortion for every 3 live births in 1975. This represents an increase of 38 percent in the ratio in the past 2 years. It has not been clearly established just how much of the rapid increase in legal abortions since the late 1960's may be due simply to the fact that abortions which would have taken place in any case are now being performed legally rather than illegally as a result of selected States liberalizing their abortion laws and finally of the 1973 Supreme Court

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<sup>4</sup>The fact that a given percentage disapprove of abortion does not mean that all others approve. Some persons in the surveys did not give an answer, and some others "did not know" whether they approved or not.

<sup>5</sup>Center for Disease Control, *Abortion Surveillance 1975* (issued April 1977), table 1; and Ellen Sullivan, et al., "Legal Abortions in the United States: 1975-1976," *Family Planning Perspectives*, Vol. 9, No. 3 (May/June 1977), table 1.

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<sup>3</sup>Charles F. Westoff and Norman B. Ryder, *The Contraceptive Revolution*, (Princeton: Princeton University Press, 1977), pp. 22-30.

## Number of Legal Abortions and Ratio of Legal Abortions Per 1,000 Live Births

Data and source	1975	1974	1973
<b>Center for Disease Control:</b>			
Number of abortions.....	854,853	763,476	615,831
Abortion ratio.....	272	242	196
<b>Alan Guttmacher Institute:</b>			
Number of abortions.....	1,034,200	898,600	744,600
Abortion ratio.....	331	282	239

Roe v. Wade decision.<sup>6</sup> Whether or not the total abortion ratio, including legal and illegal abortions, increased much from 1969 to 1975, there has certainly been a great increase in the incidence of legal abortion.

### Characteristics of Women Receiving Abortions

The effect of the 1973 Supreme Court decision is reflected in the percentage of legal, reported abortions which were performed in a State other than that in which the woman resided. In 1975, 11 percent of abortions were performed in a State in which the woman was not a resident; in 1973 the percentage was more than twice as great (table 6-4). In 1972, for which data are not shown in this report, almost 44 percent of the abortions reported to the Center for Disease Control were performed outside the State of the woman's residence. It seems clear that the liberalization of abortion legislation in the early 1970's and the concomitant increase in the number of facilities providing legal abortions have greatly reduced the need for women to travel out of State to receive the services they seek.

In 1975, about one-third of all reported legal abortions were performed on women less than 20 years old. This statistic remained almost unchanged for at least 3 years (table 6-4). However, the percentage of abortions performed on White women regardless of age has been declining during the same period; correspondingly, the percentage of abortions which were performed on women of Black and other races has increased. In 1976 about 86 percent of all women in the childbearing years (age 15 to 44 years) were White. By contrast, only 68 percent of the abortions reported in that year were performed on White women.

The vast majority of abortions, almost 3 of every 4 in 1975, were performed on women who were not married, including those who had never married as well as persons who were widowed or divorced. The greatest number of abortions was obtained by women with no other living children. As for the length of gestation, almost 88 percent of the 1975 legal abortions were reported as occurring

<sup>6</sup>There is no direct way to establish estimates of the number of illegal abortions occurring in a year, since this type of procedure is not reported. However, the number of deaths associated with illegal abortions declined markedly in the 1972 to 1974 period. It is reasonable to assume, therefore, that the number of illegal abortions also declined. See Willard Cates, Jr. and Roger W. Rochart, "Illegal Abortions in the United States: 1972-1974," *Family Planning Perspectives*, Vol. 8, No. 2 (March/April 1976), pp. 86-92.

within the first 12 weeks of pregnancy, and almost half (45 percent) were reported as occurring within the first 8 weeks.

### Abortions by State of Occurrence

In 1975, there were 272 legal abortions reported to the Center for Disease Control for every 1,000 live births. However, abortion statistics vary greatly from State to State (table 6-5 and figure 6-2). The States with relatively high abortion ratios, that is, 300 or more abortions per 1,000 live births, are the three west coast States (California, Oregon, and Washington), Illinois, Maryland, and five northeastern States (New York, Connecticut, Massachusetts, Rhode Island, and Vermont). Among these States, only New York and Vermont reported more than 8 percent of the abortions as being obtained by residents of other States. In New York, 16 percent were obtained by nonresidents, but the number of abortions to residents of New York would have been sufficient to make it the State with the highest ratio. Thirty-one percent of the abortions in Vermont were to nonresidents; if these had not occurred, the abortion ratio for Vermont would have been well below the national average.

States with very low abortion ratios (less than 100 per 1,000 live births) were clustered in the Old South and in the Rocky Mountain area. They also included North Dakota, Iowa, Indiana, and West Virginia, although Iowa presents a clear instance of incomplete reporting (see footnotes cited in table 6-5).

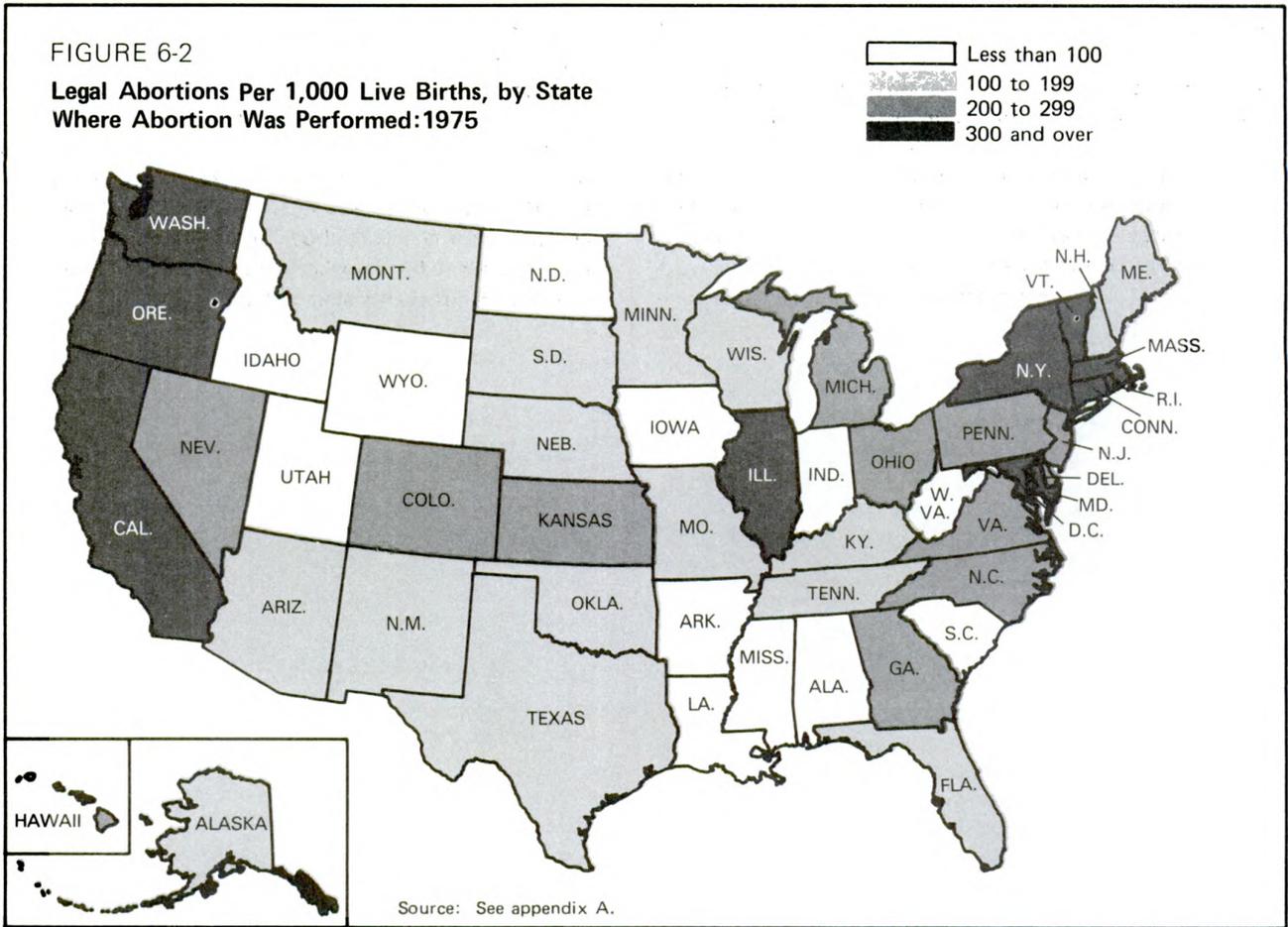
The District of Columbia presents a special case. First, it is a large city and, therefore, is more appropriately compared with other cities rather than States. Also, over half the abortions occurring in the District in 1975 were obtained by women not residing in the city. The net result of being an urban center and attracting many nonresidents to its facilities was that there were more than twice as many abortions in the District in 1975 than there were live births. Even so, considering only District residents, there were still more abortions than live births in the District of Columbia in 1975.

### Unwanted Fertility

Except for abortions performed for the sake of the woman's health or to prevent the birth of a seriously deformed child, abortion and contraception are two ways of dealing with the

FIGURE 6-2

Legal Abortions Per 1,000 Live Births, by State  
Where Abortion Was Performed: 1975



Source: See appendix A.

problem of preventing the birth of children who are not wanted either at a given time or at any time in the future. To the extent that the methods are successful, some children are not born who otherwise would have been born. Although there is no way to estimate the number of births which are prevented by contraception, as there is in the case of births prevented by legal abortions, there are indications of substantial decreases in numbers and rates of unwanted births during the last half of the 1960's.<sup>7</sup>

Evidence of the decrease in unwanted fertility is provided by the 1973 National Survey of Family Growth (NSFG), which sampled all ever-married women 15 to 44 years old and single women of the same age who were living with one or more of their own children. With respect to each pregnancy a woman had, she was asked whether or not she wanted a(nother) child at the time she became pregnant.<sup>8</sup> By this measure, 13 percent of the children born to these women were "not wanted" or "probably not wanted" when

they were conceived (table 6-6). Of course, this "not wanting" refers to the state of the mother's mind at the time of becoming pregnant, not necessarily to her attitude toward her child after its birth. Another consideration in assessing these data is the fact that respondents in the survey retrospectively reported on how they felt at sometime in the past, and present awareness of and reports on past states of mind can easily be affected by the interviewing process and by current feelings and attitudes. For these reasons, the 13 percent "unwanted" at the time of becoming pregnant may be a substantial understatement of the reality.

According to the attitudes reported in the 1973 NSFG, there is a great difference between White and Black women in the amount of unwanted fertility. Over one-quarter of the births to Black women were said to be unwanted at the time of conception, as compared with only one-tenth of the births to White women (table 6-6). Indeed, if all the births reported as unwanted at the time of conception had been prevented, the average number of children born to Black women might have been less than the average for White women.

The data summarized in table 6-6 also suggest that, in general, mothers who have more years of education report a smaller amount of unwanted fertility. An exception to this rule is that women who drop out of high school report more

<sup>7</sup>See Norman B. Ryder and Charles F. Westoff, "Wanted and Unwanted Fertility in the United States: 1965 and 1970," in U.S. Commission on Population Growth and the American Future, Research Report, Vol. I. *Demographic and Social Aspects of Population Growth*, Charles F. Westoff and Robert Parke, Jr. (eds.), (Washington: U.S. Government Printing Office, 1972), pp. 467-487. For a discussion of the reduction in "unplanned" births, which include those not wanted at any time and those not wanted at the actual time of conception, see Charles F. Westoff, "The Decline of Unplanned Births in the United States," *Science*, Vol. 191 (9 January 1976), pp.38-40.

<sup>8</sup>National Center for Health Statistics, *Advanced data from Vital and Health Statistics*, No. 9, August 10, 1977.

unwanted fertility than do women who never went to high school. To some extent, this finding may be attributable to the fact that many girls who become pregnant during their high school years are forced to quit school to bear and care for their children. Thus, unwanted fertility sometimes prevents higher educational attainment. For many other women, however, the amount of exposure to the educational processes may, somehow or other, have influenced their ability to control their fertility.

No matter how effective fertility control methods become

and how widely they are accepted and utilized, it is unlikely that unwanted childbearing will be totally eliminated. However, with the development and use of highly effective contraceptive techniques, such as the pill, and the IUD, and the increasing use of sterilization and abortion, the amount of unwanted fertility has been substantially reduced in the last 15 to 20 years. Assuming that the trend toward the use of more effective methods of fertility control continues, the prospect is for a further reduction in the proportion of births which are unintended by the parents.

TABLE 6-1

Percentage of Married Women Currently  
Practicing Contraception, by Selected Characteristics: 1973

Characteristic	Age of woman		
	Total, 15 to 44 years	15 to 29 years	30 to 44 years
All women.....	69.6	70.2	69.1
RACE			
White.....	70.5	70.7	70.3
Black.....	60.0	63.7	56.9
CHILDREN BORN TO DATE			
0 or 1 child.....	58.3	63.7	42.2
2 to 4 children.....	77.0	81.2	75.0
5 children or more.....	72.5	64.9	73.0
LABOR FORCE STATUS			
In labor force.....	70.5	73.6	68.0
Not in labor force.....	68.9	67.8	69.8
RELIGION			
Protestant.....	70.7	70.4	71.1
Catholic.....	66.5	68.1	65.2
Jewish.....	84.9	82.1	86.3
YEARS OF SCHOOL COMPLETED			
0 to 11 years.....	62.5	62.7	62.3
12 years.....	71.2	72.3	70.2
13 years or more.....	74.7	73.0	76.3

Source: See appendix A.

TABLE 6-2

**Contraceptive Practice of Currently Married Women  
15 to 44 Years Old, by Age and Race: 1965 and 1973**

(For meaning of symbols, see page IX)

Race and contraceptive practice	Age of woman and year of survey							
	Total, 15 to 44 years		15 to 24 years		25 to 34 years		35 to 44 years	
	1973	1965	1973	1965	1973	1965	1973	1965
<b>WHITE</b>								
Number of women surveyed.....	5,301	3,771	1,174	796	2,302	1,413	1,825	1,562
Contraceptive practice (percent):								
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Not using contraception.....	29.5	35.2	30.9	40.3	26.3	30.7	32.4	36.8
Wife sterilized.....	8.2	4.1	2.3	0.6	8.1	4.3	11.9	5.6
Husband sterilized.....	8.4	3.5	1.7	1.0	8.6	4.0	12.3	4.4
Pill.....	25.0	15.6	44.5	30.7	25.8	17.3	11.9	6.3
IUD.....	6.6	0.7	7.2	0.9	8.9	0.8	3.5	0.4
Diaphragm.....	2.5	6.8	1.2	2.6	2.4	6.5	3.5	9.1
Condom.....	9.9	14.5	6.1	9.2	10.2	16.3	12.1	15.6
Rhythm.....	2.9	7.5	1.2	4.9	2.3	7.4	4.7	9.0
All other methods <sup>1</sup> .....	7.0	12.1	4.9	9.8	7.4	12.7	7.7	12.8
<b>BLACK</b>								
Number of women surveyed.....	2,197	969	592	257	869	368	736	344
Contraceptive practice (percent):								
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Not using contraception.....	40.0	42.9	33.9	38.5	36.9	37.2	48.2	52.0
Wife sterilized.....	13.6	8.3	4.2	1.9	10.7	7.9	24.1	13.4
Husband sterilized.....	1.0	0.3	0.1	0.4	1.8	0.3	0.8	0.3
Pill.....	26.3	12.4	48.6	17.1	27.1	17.1	8.2	3.8
IUD.....	7.6	1.7	7.9	3.5	10.7	1.9	4.0	-
Diaphragm.....	1.2	2.9	0.1	1.9	1.8	2.7	1.4	3.8
Condom.....	3.2	9.7	1.4	10.9	3.1	12.8	4.7	5.5
Rhythm.....	0.8	1.4	1.0	1.6	0.7	2.2	0.6	0.6
All other methods <sup>1</sup> .....	6.3	20.4	2.8	24.2	7.2	17.9	8.0	20.6

<sup>1</sup>Includes foam, withdrawal, and douche as well as other unspecified methods.

Source: See appendix A.

TABLE 6-3

**Percentage of Men and Women Who Disapprove of Abortion  
for Each of Four Reasons: Selected Surveys, 1962 to 1977**

Reason for abortion	Year of survey			
	March 1977	March 1972	May 1968	August 1962
Number of respondents.....	1,530	1,613	1,483	1,391
PERCENT				
Danger to mother's health.....	9	12	10	16
Danger of birth defect in baby.....	14	20	25	29
Family cannot afford another child.....	45	48	72	74
Couple wants no more children.....	51	57	85	(NA)

Source: See appendix A.

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TABLE 6-4

Characteristics of Women Receiving Abortions: 1973 to 1975

Characteristics	Percent distribution <sup>1</sup>		
	1975	1974	1973
<b>RESIDENCE</b>			
In State of occurrence			
Abortion in-State.....	89.2	86.6	74.8
Abortion out-of-State.....	10.8	13.4	25.2
<b>AGE</b>			
Less than 20 years.....	33.1	32.7	32.7
20 to 24 years.....	31.9	31.8	32.0
25 years and over.....	35.0	35.6	35.3
<b>RACE</b>			
White.....	67.8	69.7	72.5
Black and other.....	32.2	30.3	27.5
<b>MARITAL STATUS</b>			
Married.....	26.1	27.4	27.4
Unmarried.....	73.9	72.6	72.6
<b>NUMBER OF LIVING CHILDREN</b>			
None.....	47.1	47.8	48.6
1.....	20.2	19.6	18.8
2.....	15.5	14.8	14.2
3.....	8.7	8.7	8.7
4.....	4.4	4.5	4.8
5 or more.....	4.2	4.5	4.9
<b>WEEKS OF GESTATION</b>			
8 or fewer.....	44.6	42.6	36.1
9 to 10.....	28.4	28.7	29.4
11 to 12.....	14.9	15.4	17.9
13 to 15.....	5.0	5.5	6.9
16 to 20.....	6.1	6.5	8.0
21 or more.....	1.0	1.2	1.7

<sup>1</sup>Excludes unknowns.

Source: See appendix A.

TABLE 6-5

**Reported Legal Abortions, Abortion Ratios, Percent of Abortions Performed on Out-of-State Residents, and Percent of Abortions Performed on Unmarried Women, by State: 1975**

(For meaning of symbols, see page IX)

State of occurrence	Total legal abortions reported <sup>1</sup>	Legal abortions per 1,000 live births	Percent of legal abortions performed on out-of-State residents <sup>2</sup>	Percent of legal abortions performed on unmarried women <sup>3</sup>
Total, all States.....	854,853	272	10.8	<sup>4</sup> 72.7
Alabama.....	<sup>5</sup> 2,747	47	8.0	(NR)
Alaska.....	1,248	169	0.6	68.3
Arizona.....	<sup>5</sup> 5,482	139	0.9	(NR)
Arkansas.....	1,925	57	(NR)	69.6
California.....	142,067	448	1.9	73.1
Colorado.....	9,744	241	9.2	71.9
Connecticut.....	10,820	301	1.6	(NR)
Delaware.....	2,322	282	(NR)	(NR)
District of Columbia.....	22,721	2,328	55.2	75.6
Florida.....	16,745	158	(NR)	(NR)
Georgia.....	23,733	297	15.3	70.3
Hawaii.....	4,545	290	5.0	60.9
Idaho.....	<sup>5</sup> 672	41	1.9	(NR)
Illinois.....	58,743	347	7.5	73.8
Indiana.....	7,859	95	1.5	71.9
Iowa.....	<sup>6</sup> 1,345	65	6.7	74.1
Kansas.....	9,160	272	39.0	77.4
Kentucky.....	<sup>5</sup> 6,295	115	31.3	75.1
Louisiana.....	4,180	62	9.5	75.2
Maine.....	<sup>5</sup> 1,930	126	2.1	(NR)
Maryland.....	18,865	358	6.5	77.5
Massachusetts.....	<sup>7</sup> 29,940	438	(NR)	(NR)
Michigan.....	<sup>5</sup> 34,210	255	10.0	(NR)
Minnesota.....	10,565	187	13.4	82.3
Mississippi.....	315	7	17.5	59.0
Missouri.....	10,244	150	20.8	<sup>8</sup> 65.6
Montana.....	1,535	130	2.1	73.9
Nebraska.....	3,406	144	22.9	80.7
Nevada.....	1,807	204	29.8	(NR)
New Hampshire.....	1,396	126	6.3	69.1
New Jersey.....	<sup>7</sup> 26,291	287	1.4	(NR)
New Mexico.....	<sup>5</sup> 4,195	199	7.3	(NR)
New York.....	147,229	624	16.4	70.2
North Carolina.....	19,960	247	6.2	68.9
North Dakota.....	812	77	(NR)	(NR)
Ohio.....	<sup>5</sup> 36,675	231	6.6	(NR)
Oklahoma.....	<sup>5</sup> 5,808	136	11.4	(NR)
Oregon.....	10,641	319	5.4	76.2
Pennsylvania.....	43,319	291	12.2	(NR)
Rhode Island.....	3,253	303	7.9	<sup>9</sup> 65.4
South Carolina.....	4,511	97	4.1	75.6
South Dakota.....	1,475	131	42.9	79.5
Tennessee.....	11,081	178	15.9	75.2
Texas.....	<sup>5</sup> 37,894	176	6.5	(NR)
Utah.....	2,146	68	5.5	80.3
Vermont.....	2,100	313	31.1	75.0
Virginia.....	17,999	257	5.3	74.8
Washington.....	20,963	412	(NR)	74.1
West Virginia.....	<sup>5</sup> 96	3	19.4	(NR)
Wisconsin.....	<sup>5</sup> 11,300	173	(NR)	(NR)
Wyoming.....	<sup>5</sup> 539	77	1.9	(NR)

<sup>1</sup>Data from central health agencies unless otherwise noted.<sup>2</sup>Based on abortions where the in-State and out-of-State residence status of the woman is known. Nationally, this accounted for 85.0 percent of all legal abortions reported for 1975 to the Center for Disease Control.<sup>3</sup>Unless noted, unmarried women include the widowed, separated, divorced, and never-married. Percentages are based on all reported legal abortions in a State. Unless noted, less than 10 percent of the abortions performed in a State are reported with marital status unknown. In all States combined in which the marital status of women undergoing abortions was reported, 1.7 percent of the abortions did not include the marital status of the woman.<sup>4</sup>Based on 581,249 abortions in 31 States reporting marital status.<sup>5</sup>Reported from one or more hospitals and/or facilities in the State.<sup>6</sup>January to June.<sup>7</sup>Reported from State health department and one or more hospitals and/or facilities in the State.<sup>8</sup>Marital status unknown, 10.8 percent.<sup>9</sup>Does not include separated women.

Source: See appendix A.

TABLE 6-6

## Unwanted Fertility Among Mothers 15 to 44 Years Old: 1973

Race and years of school completed	Number of mothers <sup>1</sup> (thousands)	Number of births per woman		Percent unwanted <sup>3</sup>
		Total	Unwanted births <sup>2</sup>	
Total.....	25,803	2.64	0.35	13.1
<b>RACE</b>				
White.....	22,182	2.59	0.27	10.5
Black.....	3,359	2.97	0.83	27.9
<b>YEARS OF SCHOOL COMPLETED</b>				
Less than high school.....	2,622	3.48	0.57	16.5
High school:				
1 to 3 years.....	5,697	2.96	0.53	17.9
4 years.....	12,161	2.46	0.27	11.1
College:				
1 to 3 years.....	3,182	2.38	0.23	9.7
4 years or more.....	2,140	2.18	0.16	7.4

<sup>1</sup>The National Survey of Family Growth, from which these data are derived, included in the sample universe of single women living with one or more of their own children as well as all ever-married women in the specified age range.

<sup>2</sup>Unwanted births include all births which the respondent reported as not wanted or probably not wanted.

<sup>3</sup>Percents are calculated from numbers of births, not shown in this table.

Source: See appendix A.

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## Appendix A.

# References

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### References for Tables

#### Table

1-1. Unless otherwise indicated, data for the specified time periods below were obtained from the following sources:

1871 to 1875 and 1901 to 1905—Robert R. Kuczynski, **The Balance of Births and Deaths**, Vol. I (New York: Macmillan, 1928), p. 6, and Vol. II (Washington, D.C.: The Brookings Institution, 1931), p. 134. Copyright 1928 and 1931 by The Brookings Institution, used by permission.

1930 to 1934 through 1970 to 1974—United Nations, **United Nations Demographic Yearbook 1969** (New York: United Nations Statistical Office, 1970), table 12 and **United Nations Demographic Yearbook 1975**, table 21. Copyright 1970 and 1977 by the United Nations, used by permission.

United States, White population—data for 1871 to 1875, 1901 to 1905, 1930 to 1934, 1945 to 1949, and 1955 to 1959 are from Ansley J. Coale and Melvin Zelnik, **New Estimates of Fertility and Population in the United States** (Princeton: Princeton University Press, 1963), table 1 (copyright 1963 by Princeton University Press, used by permission); data for 1970 to 1974 are from National Center for Health Statistics, **Monthly Vital Statistics Report**, "Advance Report, Final Natality Statistics, 1975," Vol. 25, No. 10 (supplement), table 1.

United States, Black population—data for 1870 to 1879, 1900 to 1904, 1930 to 1934, 1945 to 1949, and 1955 to 1959 are from Ansley J. Coale and Norfleet W. Rives, "A Statistical Reconstruction of the Black Population of the United States 1880-1970: Estimates of True Numbers by Age and Sex, Birth Rates, and Total Fertility," **Population Index**, Vol. 39, No. 1 (January 1973), table 7; data for 1970 to 1974 are from National Center for Health Statistics, *op. cit.*

#### Table

Australia—data from 1871 to 1875 through 1945 to 1949 are from Australia, Commonwealth Bureau of Statistics, **Demography 1949** (Canberra), table 132.

Japan—data for 1872 to 1876 and 1901 to 1905 are from Japan, Bureau of Statistics, **Japan Statistical Yearbook 1972** (Tokyo), p. 9.

1-2. Data for 1975 and 1974 are from National Center for Health Statistics, **Monthly Vital Statistics Report**, "Advance Report, Final Natality Statistics, 1975," Vol. 25, No. 10, tables 1 and 3; data from 1965 to 1973 are from National Center for Health Statistics, **Vital Statistics of the United States 1973**, Vol. I, Natality, tables 1-2 and 1-6; data from 1920-1924 to 1960-1964 are from U.S. Bureau of the Census, **Current Population Reports**, Series P-23, No. 36, "Fertility Indicators: 1970," table 2.

1-3. Data for 1974 are from National Center for Health Statistics, **Monthly Vital Statistics Report**, "Advance Report, Final Natality Statistics, 1974," Vol. 24, No. 11, table 3. Data from 1920 to 1973 are from Robert L. Heuser, **Fertility Tables for Birth Cohorts by Color: United States, 1917-1973** (Washington, D.C.: U.S. Government Printing Office, 1976), tables 3B and 3C.

1-4. Data for 1975, 1970, and 1960 are from U.S. Bureau of the Census, **Current Population Reports**, Series P-20, No. 288, "Fertility History and Prospects of American Women: June 1975 (Advance Report)," table 6; data for 1965 are from U.S. Bureau of the Census, **Current Population Reports**, Series P-20, No. 186, "Marriage, Fertility, and Childspacing: June 1965," table 1; data for 1950 are from U.S. Bureau of the Census, **1950 Census of Population**, Vol. IV, Special Reports, Part 5, Chapter C, "Fertility," table 2; data for 1940 are from U.S. Bureau of the Census, **Sixteenth Census of the United States: 1940**, "Differential Fertility 1940 and 1910: Fertility for States and Large Cities," table 1.

Table

1-5. Data for age distributions for the 1860 census are from U.S. Bureau of the Census, **Eighth Census of the United States, 1860**, "Mortality and Miscellaneous Statistics," table J; data for 1880 are from U.S. Bureau of the Census, **Tenth Census of the United States, 1880**, Vol. 1, "Population," table xx; data for 1920 and 1960 are from U.S. Bureau of the Census, **1960 Census of Population**, Vol. 1, "Characteristics of the Population," Part 1, United States Summary, Section 1, table 47. Median ages are from U.S. Bureau of the Census, **Statistical Abstract of the United States: 1976**, table 24.

1-6. Heuser, *op. cit.*, table 8A.

2-1. U.S. Bureau of the Census, **Current Population Reports**, Series P-20, No. 315, "Trends in Childspacing: June 1975," tables 2 and 3, and the June 1976 Current Population Survey.

2-2. U.S. Bureau of the Census, **Current Population Reports**, Series P-20, Nos. 144, 159, 170, 187, 198, and 212, "Marital Status and Family Status" for the years 1965 through 1970, and Nos. 225, 242, 255, 271, and 306, "Marital Status and Living Arrangements" for the years 1971 through 1976.

2-3. U.S. Bureau of the Census, **Current Population Reports**, Series P-20, No. 315, "Trends in Childspacing: June 1975," tables 36, 37, 38, 47, and 48, and the June 1975 Current Population Survey.

2-4. Data derived from U.S. Bureau of the Census, **Current Population Reports**, Series P-20, No. 297, "Number, Timing, and Duration of Marriages and Divorces in the United States: June 1975," table 2.

2-5. Paul C. Glick, "Updating the Life Cycle of the Family," **Journal of Marriage and the Family**, Vol. 39 (February 1977), pp. 5-13.

3-1. Data for 1971 and 1976 are from U.S. Bureau of the Census, **Current Population Reports**, Series P-20, No. 308, "Fertility of American Women: June 1976;" data for 1967 are from U.S. Bureau of the Census, **Current Population Reports**, Series P-20, No. 211, "Previous and Prospective Fertility: 1967," and unpublished data from the Survey of Economic Opportunity; data for 1965 are from the National Fertility Study; data for 1955 and 1960 are from Ronald Freedman and Larry Bumpass, "Fertility Expectations in the United States: 1962-1964," **Population Index**, Vol. 32, No. 2 (April 1966), table 3.

3-2. Projected cohort fertility is from Pascal K. Whelpton, Arthur A. Campbell, and John E. Patterson, **Fertility and Family Planning in the United States** (Princeton: Princeton University Press, 1966), table 204. Copyright 1966 by Princeton University Press, used by permission. Lifetime fertility as of \_\_\_\_\_ from the June 1976 Current

Table

3-3. U.S. Bureau of the Census, **Current Population Reports**, Series P-20, No. 301, "Fertility of American Women: June 1975" and No. 308, "Fertility of American Women: June 1976."

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## Table

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## Appendix B.

# Sources and Reliability of the Estimates

### Sources of the Data

Estimates in this report are based on data derived from a broad spectrum of sources. These data sources include the decennial censuses, the Survey of Economic Opportunity (1967), and the Current Population Surveys of June for the years 1971 through 1976, all of which are collected by the Bureau of the Census. In addition, a large amount of the data in this report have been collected by the National Center for Health Statistics (NCHS) and published in annual volumes of **Vital Statistics of the United States** and in various recent issues of **Monthly Vital Statistics Report**. Data from the National Survey of Family Growth, collected by NCHS, has also been used in this report. Finally, data are also shown which have been collected by nongovernment sources, such as the Growth of American Families study and the National Fertility Survey, and also include data published in books and journal articles by noted demographers and

sociologists. A complete list of detailed references for each table and figure is presented in the section "References for Tables and Figures."

Brief descriptions of the sources from and procedures by which Census Bureau data were obtained are given below. Further information for the data from other sources can be obtained in the individual publications referenced in the report.

**Current Population Survey (CPS).** The principal objective of the monthly CPS is to collect labor force data for the civilian noninstitutional population. Questions relating to labor force participation are asked every month about each person 14 years old or older in each sample household. In addition, supplementary questions are asked in June about children already born to women and about their expectations for births in the future.

Description of the Current Population Survey

Time period	Number of sample areas <sup>1</sup>	Households eligible		Households visited, not interviewed <sup>2</sup>
		Interviewed	Not interviewed	
August 1972 to present.....	461	45,000	2,000	8,000
August 1971 to July 1972.....	449	45,000	2,000	8,000
January 1967 to July 1971.....	449	48,000	2,000	8,500
March 1963 to December 1966.....	357	33,500	1,500	6,000
January 1960 to February 1963.....	<sup>3</sup> 333	33,500	1,500	6,000
May 1956 to December 1959.....	330	33,500	1,500	6,000
February 1954 to April 1956.....	230	21,000	500-1,000	3,000-3,500

<sup>1</sup>Beginning in May 1956, these areas were chosen to provide coverage in each State and the District of Columbia.

<sup>2</sup>These are households which were visited, but were found to be vacant or otherwise not eligible for interview.

<sup>3</sup>Three sample areas were added in 1960 to represent Alaska and Hawaii after Statehood.

The following table provides a description of some aspects of the Current Population Survey design. The present sample was initially selected from 1970 census files and has been updated continuously to reflect new construction where possible. (See section on "Nonsampling Variability" below.) Previous samples were selected from the files of the census most recently completed at the time of the survey.

The estimation procedure used for CPS data involves the inflation of weighted sample results to independent estimates of the civilian noninstitutional population of the United States by age, race, and sex. These independent estimates are based on statistics from decennial censuses; statistics on births, deaths, immigration, and emigration; and statistics on the strength of the Armed Forces.

**1967 Survey of Economic Opportunity (SEO).** The 1967 Survey of Economic Opportunity sample was spread over 357 areas comprising 701 counties and independent cities with coverage in each of the 50 States and the District of Columbia. Approximately 29,000 occupied households were eligible for interview. Of this number about 2,500 of the occupied units were visited but interviews were not obtained because the occupants were not found at home after repeated calls or were unavailable for some other reason. In addition to the 29,000, about 7,700 sample units were visited but were found to be vacant or otherwise not to be interviewed.

The SEO sample was selected so that there was a disproportionately large sample from the Black and other races population. The weights applied to each sample case were adjusted to reflect this. This sampling procedure was used to provide more reliable estimates for the population of Black and other races, although it was known that reliability of estimates not broken down by race and of estimates for Whites would be reduced.

**Decennial census of population.** Decennial census data in this report are based on complete counts or on the samples associated with the census. The 1940 and 1950 census data shown in the tables are based on 3.3-percent and 2.4-percent samples, respectively. The 1960 and 1970 census data are based on 5-percent samples. Descriptions of the samples can be found in the appropriate census publications.

### **Reliability of the Estimates Based on Census Bureau Data**

Since the decennial census, CPS, and SEO estimates in this report are based on samples, they may differ somewhat from the figures that would have been obtained if a complete census had been taken using the same questionnaires, instructions, and enumerators. There are two types of errors possible in an estimate based on a sample survey—sampling error and nonsampling error. For many of the estimates in this report, indications of the magnitude of sampling error are provided in the source publications referred to in footnotes or in the list of sources for tables and figures. These standard errors also partially measure the effect of some nonsampling errors in response and enumeration, but do not measure any systematic biases in the data. The

full extent of nonsampling error, however, is unknown. Consequently, particular care should be exercised in the interpretation of statistics based on a relatively small number of cases or on small differences between estimates.

**Nonsampling variability.** Statistics based on sample surveys are subject to errors of response and nonreporting in addition to sampling variability. Nonsampling errors can be attributed to many sources, e.g., inability to obtain information about all cases in the sample, definitional difficulties, differences in the interpretation of questions, inability or unwillingness to provide correct information on the part of respondents, inability to recall information, errors made in collection such as in recording or coding the data, errors made in processing the data, errors made in estimating values for missing data, and failure to represent all units with the sample (undercoverage).

Undercoverage in the CPS results from two causes. The first is that some households, for reasons explained below, are not represented in the sample universe. The second cause of undercoverage is the fact that some individuals living in households included in the sample are not listed as household members and are not included in the survey. Overall undercoverage is estimated to be about 5 percent, in comparison with the 1970 Decennial Census. Generally, undercoverage is greater for males than for females and greater for Blacks and other races than for Whites. Ratio estimation to independent age-sex-race population controls, as described previously, partially corrects for the bias due to survey undercoverage. However, biases in the estimates still exist to the extent that persons who should have been interviewed but were not (due to either of the causes mentioned above) have different characteristics than persons in the same age-sex-race group who were interviewed. Furthermore, the independent population controls used for weighting the sample results have not been adjusted for the undercount in the 1970 census, which was estimated to be 2.5 percent of the total population counted in the census. With respect to differences in undercoverage according to age, sex, and race, the 1970 census is similar to the CPS.

The approximate magnitude of two sources of undercoverage of housing units is known. First, of the 83,000,000 housing units in the United States, about 600,000 new construction housing units other than mobile homes are not represented in the CPS sample because they were assigned building permits prior to the 1970 census, but building was not completed by the time of the census, (i.e., April 1970). Most conventional new construction, for which building permits were issued after the census, is represented. Second, about 290,000 occupied mobile homes are not represented in CPS; these units were either missed in the census or have been built or occupied since the census. These estimates of missed units are relevant to the present sample only and not to earlier designs where the extent of undercoverage was generally less. The extent of other sources of undercoverage of housing units is unknown but believed to be small.

With respect to birth expectations from Current Population Surveys, 15 to 20 percent of women in the sampled households were counted as "not reporting." These percentages include women who were uncertain about addi-

tional births expected and did not provide a numerical response, as well as women who either were not contacted by the interviewer or who refused to answer the questions. The tables in this report showing birth expectations are restricted to women who supplied a numerical answer. What bias, if any, is introduced by this procedure is not known.

About 5 to 8 percent of women did not report the number of children ever born in the 1970 Decennial Census and in Current Population Surveys. Imputed (allocated) numbers were based on a match of these women with other women of similar characteristics who did report children ever born. Tables presenting rates of children ever born are based on all women in the sample, including women with an imputed value for number of children ever born.

Except in the June 1976 CPS, only ever-married women were asked about numbers of children already born. Rates of children ever born per 1,000 women presented in this report represent single women as childless. This procedure is biased

in that it tends to understate true rates, especially for younger ages at which greater proportions of women are single.

With respect to single women, who were asked in the June 1976 CPS about previous childbearing, there is the likelihood of some deliberate misreporting of the facts, especially among women who perceive childbearing out of wedlock to bear a social, moral, or legal stigma. It is also quite possible that the level of misreporting differs systematically according to various demographic and social characteristics.

**Comparability of data sources.** Data obtained from the CPS are not entirely comparable with data obtained from SEO or other sources. This is due in large part to differences in interviewer training and experience and in differing survey processes. This is an additional component of error not reflected in the standard error tables. Therefore, caution should be used in comparing results between these different sources.

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