

PART THREE

Marriage Squeeze Effects

The term *marriage squeeze* has been coined by Paul Glick to describe a situation where members of one sex are faced with a relatively small pool of marriage eligibles (Glick, Beresford, and Heer 1963). It was stated in Part Two that marriage squeezes for men or women--based on the relative number of men and women interacting in a marriage market or sex ratio--can have an impact on labor supply (Hypothesis 1), and on various aspects of marriage (Hypotheses 8, 15, 21, 27, 32 and 40). In this part, some of these hypotheses are restated, expanded, and tested.

The two chapters on marriage squeeze effects vary in their level of technicality. The first chapter, Chapter 5, was written for a mixed audience of sociologists and economists, and avoids technical jargon and statistical techniques familiar to economists. Chapter 6 contains a few equations and a statistical analysis. The chapters also vary in the generality of their subject matter: whereas Chapter 5 looks at the effect of marriage squeezes on a number of social and economic aspects of life, Chapter 6 focuses on a single effect of sex ratio variations, namely, its effect on the participation of married women in the labor force. Finally, the chapters vary in the type of data they use. Chapter 5 studies variations over time, while Chapter 6 tests for the effects of marriage squeezes on the participation of married women in the labor force using data for U.S. cities in 1930 and 1980.

Other chapters in this volume also touch on the subject of marriage squeeze effects: Chapter 2 mentioned marriage squeeze effects on dowry levels, Chapter 8 develops a hypothesis on the effect of marriage squeezes on the probability of religious intermarriage, and Chapter 11 explains the hypothesis dealing with the effect of marriage squeezes on the likelihood that a society outlaws polygamy.

**Marriage Squeezes and Marriage,
Cohabitation, Labor Supply,
and Divorce: Time Trends**

This chapter first adds some hypotheses to the marriage squeeze effects predicted in Part Two. Measures of marriage squeeze based on sex ratios--the relative number of men to women--are used to explain marriage rates divorce, and sorting patterns, cohabitation, married women's labor force participation, divorce rates and feminism. Additional evidence is also discussed. In particular, the chapter offers a reinterpretation of black-white differences in marriage, divorce, and women's participation in the labor force.

Hypotheses and Literature Review

Part Two presented a number of hypotheses relating the number of men and women participating in marriage markets to labor supply and various aspects of marriage. It was hypothesized that marriage squeezes for men are associated with lower female labor force participation than marriage squeezes for women (Hypothesis 1 or H_1), with a higher likelihood that women are in any kind of marriage or union (H_8), and with a higher likelihood that a

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woman is formally married (H_{15}) than marriage squeezes for women. These hypotheses can also be stated in terms of the relative number of men and women. Following the convention accepted amongst most demographers, sex ratios are defined as the number of men divided by the number of women. High sex ratios (above 1.00) imply a marriage squeeze for men, whereas low sex ratios (below 1.00) imply a marriage squeeze for women.

Hypothesis 1 stated that marriage squeezes for men are less likely to be associated with participation of women in the labor force than marriage squeezes for women. Some of these hypotheses have corollaries that will also be evaluated empirically. As mentioned in Chapter 3, a corollary of Hypothesis 1 is that a marriage squeeze for men is expected to be associated with lower participation of *married* women in the labor force than a marriage squeeze for women (Hypothesis 1' or $H_{1'}$).

Hypothesis 8.1 stated that a marriage squeeze for men is expected to be associated with a higher incidence of marriage among women than a marriage squeeze for women. The effect of variations in marriage squeeze on men's likelihood to marry, divorce or cohabit is not the mirror image of these effects on women. Gender asymmetry is caused--at least in part--by differential tendencies for men and women to select marriage versus its alternatives, cohabitation and singlehood.¹ It was hypothesized in Chapter 4 that women are more likely than men to prefer a formal marriage over cohabitation. As a result, as stated in Hypothesis 15, marriage squeezes for men are likely to be associated with a higher proportion of unions taking the form of formalized marriage than marriage squeezes for women. It was therefore hypothesized in Chapter 4 that *marriage squeeze variations are expected to have larger effects on the proportion of married women than on the proportion of married men* (Hypothesis 8.4).

If a marriage squeeze for men occurs--for instance because the

number of marriageable men increases--women are affected as follows:

(1) more women get married and cohabit while fewer women stay single, and (2) of those who enter a steady relationship, more marry and fewer cohabit. This leads to an unambiguous prediction regarding a higher likelihood of marriage and lower likelihood of being single.

However, the net effect on the proportion of all women who cohabit is not clear. Defining the proportion unmarried as the proportion either never-married or cohabiting, it follows that a marriage squeeze for men is expected to cause a decrease in the proportion of unmarried women.

At the same time, an increase in the number of marriageable men causes (1) a decrease in the proportion of men who get married or cohabit and an increase in the proportion single, and (2) among men who enter a steady relationship, an increase in the proportion who marry and a decrease in the proportion who cohabit. This leads to an unambiguous prediction regarding a lower likelihood of cohabitation and higher likelihood of being single. However, the net effect on the proportion of married men, or the proportion of unmarried men defined as the sum of men who never marry or who cohabit, is not clear. A marriage squeeze for men is likely to reduce the percentage of all unmarried individuals, male or female. However, the percentage of unmarried women is expected to decrease faster than the percentage of unmarried men.

A marriage squeeze for women leads to increased proportions of unmarried women for two reasons. First, fewer women are likely to be involved in any type of heterosexual relationship. Second, women's lower bargaining power encourages an increase in the ratio of cohabiting to married couples. The percentage of unmarried men is expected to rise less than the percentage of unmarried women as a result of a marriage squeeze for women. On the one hand, more cohabitation occurs at the expense of legal marriages (which leads to an increase in the proportion of men who are unmarried), but on the other hand, some men who want to marry find a wife more easily (which leads to a decrease in the proportion of unmarried men). Likewise, one can look at the percentage of men and women who marry, keeping in mind that there are three choices: married,

cohabitating, and unmarried.

This chapter also provides evidence for Hypothesis 8.3, which stated that:

Marriage squeezes for men in a society are expected to be associated with a lower incidence of divorce among women than marriage squeezes for women.

Chapter 4 considered a number of aspects of marriage related to the compensation for women's spousal labor w^* and women's net spousal income, including the aspects mentioned in Hypotheses 1 and 15. Aspects of marriage related to such compensation that were not discussed in Chapter 4 include desirable qualities of husbands, the ratio of family expenditures benefiting the wife in relation to the husband, the value of alimony payments, and the willingness of women to have more children than they would, had they followed their own inclination.² It also follows from the market theory of marriage presented in Part Two that marriage squeezes for men will be associated with more desirable qualities found in the average husband in comparison to marriage squeezes for women.

In a marriage squeeze for men women of given quality are able to be more selective in their mating choices and will marry men with more desirable qualities than the men they would have married under less favorable market conditions. It is therefore hypothesized that

Relative to a marriage squeeze for women, in a situation of marriage squeeze for men one will find fewer matches between women who are young and single and men who are substantially older, divorced, unattractive, poor, or of a background that women prefer to avoid for some reason.³

More generally, one expects age differences in marriage to adjust to marriage squeezes. It also follows from the theory that in comparison to low sex ratios, high sex ratios are expected to be associated with relatively more expenditures benefitting the wife, higher alimony payments, and marital fertility closer to the wife's preference (if that preference diverges from the husband's).⁴

Feminism may also be related to sex ratios and marriage

squeezes. A marriage squeeze for women causes a worsening of market conditions for women in both marriage markets and labor markets. According to both a union (or economic) theory of feminism and a frustration (or psychological) theory of feminism, a worsening of women's market conditions is likely to encourage feminism. A union theory of feminism suggests that the feminist movement is a type of labor union protecting women who participate in markets for labor and marriage. According to this view, women can bargain collectively for better working conditions. Worsened conditions propel women to organize and to attempt to raise their compensations above the market level. As in other types of labor unions, the mechanism that makes bargaining for higher wages possible involves restrictions on entry into that market. Many feminists have committed themselves to singlehood, which could reflect their willingness to trade higher wages (quasi-wages w^*) for higher employment levels in markets for female spousal labor.

Alternatively, we can use a frustration (or psychological) theory of feminism, which views movements as outlets for personal frustration. People whose position has worsened relative to that of others often coalesce and form a group for protest, especially if group awareness develops easily.⁵ According to both theories, a women's movement or feminist revolution is more likely to occur when there is a worsening in women's position in the market for spousal labor, for instance as the result of a marriage squeeze for women.

The hypotheses mentioned so far in this chapter are now compared to similar hypotheses found in the literature. Demographers have long been concerned with sex ratios, the number of available men relative to the number of women of marriageable age. Demographic theories regarding the effects of sex ratios tend to be limited to effects on the incidence of marriage or marriage rates. Many studies have shown that women faced with low sex ratios were less likely to be married than women faced with high sex ratios (e.g., Glick, Beresford & Heer 1963, Henry 1975, Smith 1980, Schoen 1983, Goldman 1977, Heer and Grossbard-Shechtman 1981, Lichter *et al.* 1991).

A more general theoretical perspective on sex ratio effects

can be found in Guttentag and Secord's (1983) *Too Many Women--The Sex Ratio Question*, which was developed independently from the theory presented in Chapters 3 and 4 based on Grossbard-Shechtman (1981, 1984). Guttentag and Secord also derived hypotheses regarding the potential impact of sex ratios on divorce, cohabitation, sorting patterns, and labor supply (see Chapter 1).

For instance, an equivalent to Hypothesis 1 can be found in Guttentag and Secord (1983), who hypothesized that women (both married and unmarried) are more likely to work when sex ratios are low. However, Guttentag and Secord never formulated an equivalent to Hypothesis 1', which relates solely to married women. It is more interesting to test for sex ratio effects on labor force participation separately for married and unmarried women than to consider all women together, regardless of marital status. If lower rates of participation for married and unmarried women combined, are associated with a higher sex ratio, this could simply follow from the fact that (a) higher sex ratios imply higher marriage rates for women, and (b) married women typically work less than unmarried women.

Guttentag and Secord (1983) brought evidence in support of their hypotheses regarding marriage, divorce, sexual ideology, etc. based on data from classical Greece, medieval Europe, Russian Jews in the nineteenth Century, frontier America, and the contemporary United States. Trent and South (1989) tested the hypothesis of an inverse relationship between sex ratios and divorce using a cross-societal comparison. Guttentag and Secord's equivalent of Hypothesis 1 was validated with cross-country data by Ward and Pampel (1985), Ferber and Berg (1991), and South (1988), who all looked at overall female labor force participation (combining married and unmarried women).

The marriage squeeze effects hypothesized in this book are first tested using data on recent time trends in the United States.

Testing the Effects of Marriage Squeezes over Time

In estimating the effects of changes in marriage squeezes over time one faces conceptual problems deriving from the life-cycle nature of marriage decisions. It is not simply the existence of

marriage squeezes that affects decisions, but also the subjective awareness that such marriage squeezes exist or will occur in the future. Marriage squeezes vary substantially over the life cycle (Davis and Van den Oever 1982). If people were to take expected variations in marriage squeeze into account before making a decision, they would assess conditions in the market for spousal labor both in the present and in the future. For instance, the worse the marriage squeeze is expected to be at a later stage in life, the lower the bargaining position now. In rational decision-making, while the present would demand more consideration than the future, both existing and expected marriage squeezes could play an important role.

Another conceptual problem has to do with separating the effects of a marriage squeeze from other effects. A good test of the theory would require control for other time-related variables influencing marriage patterns. These other factors may be categorized as financial (often termed "economic"), demographic (for instance, number of people born in a particular year), cultural (for instance, the emphasis on decision making without parental influence), or political (for instance, the onset of the Vietnam war). The findings reported in the next section do not attempt to control for such factors, and therefore must be interpreted very cautiously.

In the United States at various times each sex has experienced a marriage squeeze. Variations in marriage squeeze occur because, on the average, women marry men who are generally somewhat older and because the number of births fluctuates from year to year (Glick, Beresford, and Heer 1963). In the early 1950s men faced a shortage of women. This marriage squeeze for men resulted from a decline in the absolute number of births each year during the late 1920s and early 1930s. A man born in 1930 seeking a wife born in 1932, for example, would be at a disadvantage. In the mid-1960s, when the baby-boom generation started to reach marriageable age, the United States began to experience a marriage squeeze for women. A woman born in 1946, for example, would be most likely to marry a man born in 1944. During the post-World War II baby boom, many more children were born in 1946 than in 1944, so that women belonging to the 1946 cohort were facing a marriage squeeze. A marriage squeeze variable

defined as the ratio of men between ages 20 and 29 to women between ages 18 and 29 and pictured in Figure 5.1 for the period 1951-1980 reflects this transition from a marriage squeeze for men to a marriage squeeze for women around the mid-1960s. Since the early 1980s, we have reentered a marriage squeeze for men. The sex ratio rose above 1.00 in 1980, and has continued to rise in the 1980s. This follows from a decline in fertility which began in the early 1960s and from a continuous--although varying--difference between the average male and female age at marriage.

For simplicity, I will focus on simple measures of marriage squeeze: national averages for selected years and cohorts. In accordance with the theoretical discussion, data on marriage squeezes will be compared to measures of nuptiality and age at marriage, cohabitation, labor force participation of married women, and divorce.

Variations in Marriage Squeeze over Time. As can be seen from Figure 5.1 the generations entering adulthood in the 1950s experienced a marriage squeeze for men. During that period, the number of unmarried men aged 20-29 exceeded the number of unmarried women aged 18 to 29. This marriage squeeze for men reached a peak in 1953, after which the sex ratio declined continuously until the late 1960s. The 1.00 benchmark was crossed in 1965. Based on this operational definition, it follows that a marriage squeeze for women started in 1965. In that year, 18 and 19 year old women belonged to the huge baby-boom generation, while no baby-boom men had reached age 20. Since 1978 the sex ratio facing young unmarried people has tended to climb, passing the 1.00 mark briefly in 1980. By 1980, the first generations born after the baby-boom (the cohorts born in 1961 and 1962) had entered this marriage market. If one looks at sex ratios defined as the ratio of the total number of men ages 20-29 divided by the total number of women ages 18-29, one sees the onset of a new marriage squeeze for men in the 1980s.⁶

These trends in sex ratio and marriage squeeze are now compared to trends in marriage, cohabitation, divorce, and labor supply.

Marriage. In the mid-1960s the sex ratio of young unmarried men to young unmarried women reached a level lower than 1.00, and a marriage squeeze for women occurred. Simultaneously, the downward trend in women's age at first marriage reversed and women's chances of being married decreased. Figure 5.2 shows that the onset of a marriage squeeze for women roughly coincided with the onset of an increase in the percentage of women aged 25-29 who have never married. The period of marriage squeeze for women also corresponds to an increase in the median age at first marriage for women from about 20 to 22, as shown in Figure 5.3. This same period of marriage squeeze for women also witnessed a growth in the percentage of never-married men. However, as predicted from the theory, this increase proceeded at a slower rate than the increase in the proportion of never-married women. For instance, between 1970 and 1980 the percentage of never-married women aged 25-29 grew at an average yearly rate of 9.9 percent, whereas the percentage of never-married men in the same age group grew by only 7.6 percent per year on average (see sources for Figure 5.2). These facts support Hypotheses 8.1 and 8.2.

The transition from a marriage squeeze for women to a marriage squeeze for men has not led to a complete reversal of these trends in median age at marriage and percentage of women who are unmarried. By 1980 a slowdown had occurred in the increase in women's median age at first marriage and in the percent never-married, some of which is shown in Figures 5.2 and 5.3. First, we look at recent trends in percent-never married among white women. In the 1980s the average annual growth rate in the proportion of never-married women between the ages of 25 and 29 (5.5 percent in the period 1980-1988) was lower than the annual growth rate of 9.9 percent that characterized the 1970s. This slowdown occurred as women aged 25-29 born during the baby-boom and experiencing marriage squeezes for women were being replaced by women aged 25-29 born after the baby-boom, a period of marriage squeezes for men.

The slowdown in the growth of the proportion of women who never married is even more dramatic for women between the ages of 20 and 24. In the 1970s, the proportion of never-married women in that age group grew at an annual rate of 3.6 percent a year. Between 1980 and 1988, this age group consisted mostly of post-baby-boomers, and the percent never-married grew only by 3 percent a year. In contrast, the percent never-married among women age 30 to 34 grew at a faster annual rate during the 1980s than during the 1970s (7.6 percent versus 4.7 percent). By 1988 the youngest women in this age group were still baby-boomers. As for women age 35 to 39, who were pre-baby-boomers in the 1970s and baby-boomers in the 1980s, the proportion never-married amongst them grew from 1.3 percent a year to 5.5 percent a year (Saluter 1989).

Trends in percent never-married for blacks parallel those for whites during these periods. The rate of growth in proportion of never-married black women age 20 to 24 slowed down from 5.8 percent during the 1970s to 1.2 percent for 1980-1988. A slowdown also occurred in this rate of growth for women age 25 to 29 (from 9.8 percent to 4.2 percent). In contrast, among black women born during the baby-boom the proportion never-married grew from a yearly rate of 7.6 percent in the 1970s to 11.8 percent in the 1980s (women age 30-34) and from a yearly rate of less than 1 percent in the 1970s to 7.8 percent in the 1980s (women 35-39).

Since 1985, a slowdown has also occurred in the rate of growth of the median age at first marriage. While women's median age at first marriage grew at a yearly rate of 5.9 percent in the years 1980 to 1985, it has grown at a significantly slower yearly rate of 1.3 percent in the period 1985-1988. (Saluter 1989).

Juxtaposition with parallel time-series for men shows no trend reversal for most age-race groups. During the 1970s the percentage of never-married women age 25 to 29 rose faster than the percentage of never-married men the same age (9.9 percent a year for white women versus 7.6 percent a year for white men). This is consistent with Hypothesis 8.4. However, from 1980 to 1988 the percentage of never-married women in that group also grew faster than that for men (5.5 percent versus 3.9 percent), even though sex ratios were

higher than in the 1970s. Partial evidence supporting Hypothesis 8.4 can be found among blacks age 20 to 24. Here one finds that the growth in proportion never-married slowed down more for women (from 5.8 percent in the 1970s to 1.2 percent in the 1980s), than for men (from 4.1 percent to 1.2 percent over the same period).

Cohabitation. Figure 5.4 illustrates the number of unmarried couples living together in the United States.⁷ It appears that a dramatic increase in cohabitation took place in the 1970s. From 1970 to 1980, the number of cohabiting couples grew at an annual rate of 20.4 percent (Saluter 1989). Unfortunately, no data are available for the late 1960s, so that it is impossible to determine the exact timing of the jump in the popularity of cohabitation. It could well be that the upward trend in cohabitation significantly changed in the mid-1960s and not in 1970⁸, thus coinciding with the shrinking popularity of marriage, apparent in Figures 5.1 and 5.2, and with the onset of a marriage squeeze for women. This seems to confirm Hypothesis 15, which predicted that cohabitation is more likely when there is a small number of men in comparison to the number of women in a marriage market.

As predicted from Hypothesis 15, the onset of a marriage squeeze for men in the 1980s may have caused a substantial slowdown in this trend. The yearly rate of growth in cohabitation went down from 20.4 percent in the 1970s to 7.9 percent in the period 1980-1988. Among couples without children under 15 years, who are mostly young (in 1988 68 percent of all cohabiting couples were under 34 years old), the yearly rate of growth in cohabitation went down from 25.4 percent in the 1970s to 6.8 percent in the 1980s.

So far, then, the data on young women during the 1960s and 1970s demonstrate a correspondence between three trends: the onset of a marriage squeeze for women, a decrease in the tendency for young women to get married, and (with a possible lag) a dramatic increase in the popularity of cohabitation. Furthermore, data for the late 1980s indicate that the onset of a marriage squeeze for men has caused a slowdown in the rise in age at first marriage, the percent of young people who never marry (both black and white), and particularly in the rise in cohabitation.

This correspondence does not prove that there was an impact of marriage squeezes. Other factors influencing marriage and cohabitation need to be controlled.⁹ Skeptics may point to the possible lag between the onset of a marriage squeeze for women and the rapid rise in cohabitation. Such skepticism can be dealt with by emphasizing the time it takes people to accept social norms about new lifestyles. Such lags in the adjustment of social norms can also account for the apparent divergence between the squeeze trend and that in marriage and cohabitation in the late 1970s. It appears from Figure 5.1 that while the marriage squeeze for women aged 18-29 remained more or less constant after 1965, trends in marriage and cohabitation changed dramatically throughout the late 1960s and the 1970s. Such divergence could be the result of lags in the spread of new social norms. (It could also be due to the insufficiency of the marriage squeeze measure used here. A more accurate empirical measure of the marriage squeeze variable would have to take account of variations over time for a given cohort.)

It would also be worthwhile to consider how the experience of adjacent cohorts affects a particular age group experiencing a marriage squeeze. In the early 1970s, the effect of a marriage squeeze for women aged 18-29 in a particular year became cumulative. Women entering the market for spousal labor in 1970 had to cope not only with a relative scarcity of men aged 20-29 in 1965 but also with competition by unmarried women in their thirties. Thus, 28-year-old women in 1970 faced a more unfavorable market of spousal labor in objective terms than their older sisters faced in 1965. Their perceptions and beliefs may also have been influenced by the unpleasant experience of cohorts immediately preceding them.

Employment. The marriage squeeze also relates to female employment, divorce and feminist ideology. From Figure 5.5 it is apparent that a dramatic upsurge in female employment started in 1963, about the time the sex ratio fell below 1.0.¹⁰ Again, it appears that female employment grew rapidly throughout the 1970s. In contrast, the marriage squeeze for men has been associated with a dramatic turn-around in women's labor force participation. By the late 1980s young women's participation in the labor force has grown at a

slower pace than was the case in the 1970s (Grossbard-Shechtman 1992).

Divorce. The divorce rate shows a similar pattern: a takeoff in 1967 for women aged 25-29, and in 1969 for women aged 30-34 (Carlson 1979), and steady growth throughout the 1970s and early 1980s (Figure 5.6). By the late 1980s a turnaround had occurred in divorce as well. The latest statistics available in 1992 indicate a significant decrease in divorce rates after 1985 (Norton and Miller 1991). This is consistent with Hypothesis 8.3.

Feminism. Women's liberation, whose major protagonists had also been developing and presenting their ideas for more than a decade, became popular in the mid-1960s. The simultaneous occurrence of a market squeeze for women and this social response suggests a relationship between objective market factors and subjectively perceived ideologies such as the women's liberation movement. Alternatively, worsening market conditions could have propelled women into organizing in a union-like manner. The tremendous rise in popularity of feminist ideas was in part a reflection of the growing frustration among women who were having a difficult time achieving the standard of living their mothers and older sisters had reached in the past, and in part a framework for collective action to improve market conditions.

It seems that the basic pattern of women's liberation followed closely that of the trends in marriage and cohabitation: a dramatic increase in the mid-1960s, when the concept of women's liberation reached the headlines, and a continuous growth throughout the 1970s. For instance, the magazine *MS.* for career-oriented women first appeared in 1972 and experienced a rapid growth in its readership. The feminist influence on higher education provides another indicator of the impact of the feminist revolution, among young women in particular. Women's studies first appeared in the last half of the 1960s. In 1970 the first integrated women's studies program was officially established at San Diego State University. "Between 1970 and 1975, 150 new women's studies programs were founded, a feat that was repeated between 1975 and 1980" (Boxer 1982).

The growth of the feminist movement not only coincided with the marriage squeeze and the movement away from marriage but probably also fueled a stronger reaction to the marriage squeeze. The feminist revolution may have shortened the lag between cause and actual behavior by making young women of the 1970s more aware of alternatives to traditional marriages, thereby encouraging a more widespread response to the unfavorable conditions in the market for spousal labor.

While a rise in feminism characterized the 1970s, the late 1980s and the beginning of the 1990s have witnessed the growth of social trends which could be expected in a period of marriage squeeze for men. By 1992, big weddings have become more popular and *Bride Magazine* is thicker than ever (Bratt 1992). This is consistent with a transition from marriage squeeze for women to marriage squeeze for men. Also, the more recent period has witnessed the growth of men's movements, which is compatible with increasing levels of dissatisfaction among men, possibly the result of worsening marriage market conditions.¹¹

Sex Ratio Effects Over Time - Summary. The evidence presented in this section suggests that marriage squeezes in the US affect marriage patterns in the direction predicted by this theory. The evidence presented here is impressive in that many different dimensions move in the predicted direction. More sophisticated statistical analyses which control for other relevant factors such as income, wages, contraceptive technology, preference for various types of work, and discrimination, are desirable for establishing the importance of marriage squeezes on firmer grounds. Additional preliminary evidence regarding the effects of marriage squeezes is based on comparisons across different groups (as shown in the next section) or areas (as shown in the next chapter).

Variations Across States and by Race

State data. Using data for the various states of the Union, Freiden showed that in states with a lower sex ratio--that is, with

more of a marriage squeeze for women--a lower percentage of women married (Freiden 1974). In the same vein, Keeley (1979) found that marriage squeezes delay women's expected age at first marriage.

Blacks vs. Whites. An interesting question is how marriage squeeze variations explain racial differences. It appears from U.S. data that racial variations in marriage squeeze relate to a variety of indicators of women's status. For example, Spanier and Glick (1980) have noted that the sex ratio of marriage eligibles is considerably lower among blacks than whites, which causes more acute marriage squeezes for African American women than for women of European descent. This lower sex ratio is in part a function of differences in the sex ratio at birth (Willerman 1979) and in part a result of higher mortality rates for blacks than whites, and for men than women. In addition, for the years 1967-1970 more than three times as many marriages between black men and white women occurred as between white men and black women.¹² All these factors depress the equilibrium conditions for black women in the market for spousal labor. The marriage squeeze theory probably provides one important reason why in 1970 the percentage of women aged 25-34 who ever married was 83.3 percent among blacks, as contrasted to 91.0 percent among whites (U.S. Bureau of the Census 1973).

Black-white comparisons also lend support to the hypothesis that relates marriage squeezes to sorting patterns. Spanier and Glick (1980) found that a large proportion of black women marry men who are significantly older than the typical age at marriage for the population as a whole. They also discovered that black women are significantly more likely than white women to marry either men at lower educational levels than themselves or men who had been married previously.

In addition, the theory of marriage presented here offers a new explanation for the fact that black married women have a greater tendency to participate in the labor force than white married women (Cain 1966). The adverse marriage conditions that stem from a more severe marriage squeeze for black women result in their weak bargaining position in gaining compensation for work in spousal labor. Consequently, many more black women, even those who are married,

are employed outside the home relative to white women.

Furthermore, racial differences in sex ratios may also explain differences in cohabitation and divorce rates. The black-white differentials in cohabitation are substantial. In 1976 twice as many black adults as white adults maintained living quarters without being married (Glick and Norton 1979). A black-white comparison shows that black women are more likely to be divorced. In 1970, 3.7 percent of all white women were divorced, whereas that proportion stood at 5.1 percent for black women.¹³

Uneven sex ratios may also have an impact on the incidence of homosexuality. Evidence to such effect is the prevalence of homosexual behavior in prisons. It also seems to be the case that black women--who are faced with substantially worse marriage squeezes than white women--are more likely to be homosexual than white women. A survey of people who had voted in the 1992 Presidential election indicates that 13% of the gay women surveyed were black, in contrast to 9% of all women surveyed being black. The same survey showed no overrepresentation of blacks among gay men (Cronin 1993).

Conclusion

Since the mid-1960s the United States has experienced a downward trend in the popularity of marriage, as reflected in later age at marriage, lower percentages of married men and women, and higher cohabitation and divorce rates. All these trends were interpreted here as resulting from the onset of a marriage squeeze for women, which started when baby-boomers reached adulthood around 1965. In addition, this marriage squeeze for women was related to the rapid growth in women's labor force participation and feminism which also occurred in the late 1960s and 1970s.

A marriage squeeze for men began when the post-baby-boom generation entered marriage and labor markets in the 1980s. With varying lags, we observe all the changes we expect based on sex ratio hypotheses derived from this theory: a slowdown in the movement away from marriage, a slowdown in the movement towards

cohabitation, a turnaround in divorce and female labor force participation. All these changes are particularly noticeable for the younger age groups who now are members of the baby-bust generations born after 1960. Thus, this chapter provides evidence for sex ratio hypotheses 1, 8.1, 8.3, 8.4 and 15.

Marriage squeezes thus seem to affect marriage, cohabitation, divorce, female labor force participation, and social activities. The existence of such effects implies that marriage markets exist and have important social and psychological, as well as economic, ramifications. As unappealing as such unromantic notions may sound, markets affect even the most intimate aspects of our lives.

Most readers with a Western cultural background will probably experience difficulty in accepting these views. However, in countries such as Japan and India marriage market awareness is a fact of life. These countries use a variety of means to promote market clearance, such as go-betweens, newspaper advertising, and local marriage bureaus.¹⁴ Awareness of marriage squeezes, and of marriage market forces in general, may encourage Westerners to move further away from the sixties and seventies, in a direction toward more lasting marriages and a more practical approach to marriage, as is the case in the Far East.

Notes

1. This recognizes that women are more interested in legal protection in case a separation occurs. Women's preference for tying their husbands to familial obligations, particularly after dissolution, and men's relative emphasis on avoiding limitations to their freedom (including the freedom from responsibility to their children) is strongly rooted in biological differences between the sexes. In Chapter 9, I discuss how women's stronger desire for legal protection in marriage can be derived from gender differences in productivity levels (reproductive productivity in particular) and in life-cycle variations in two major kinds of productivity (reproductive and earnings-generating). Other biologically rooted gender differences have been related to the asymmetric desire for legal protection at dissolution. This includes differences in morbidity, mortality, and

sources of sexual satisfaction (see Davis and Van den Oever 1982). It should also be kept in mind that women's relative preference for legal protection through marriage is not universal. For instance, women oriented toward a career outside the home and not toward childbearing may be less interested in stability and legal protection through marriage.

2. In Heer and Grossbard-Shechtman (1981) marriage squeezes are related to marital fertility, assuming wives are more willing to have children than husbands.

3. Others have hypothesized this relation between marriage squeeze and sorting patterns, among them Lebergott (1965) and Spanier and Glick (1980).

4. Similar hypotheses regarding these additional aspects of marriage could be derived regarding the effects of other factors, such as those found in the first rows of Table 4.1.

5. The first explanation was suggested by Yochanan Peres. The second is also found in Heer and Grossbard-Shechtman (1981).

6. The 1980s witnessed a rapid rise in age at marriage. Consequently, the number of unmarried 18 and 19 year old women grew faster than the number of unmarried men in their twenties, even though the total number of women in the relevant age categories was not growing as fast as the total number of men in the relevant age categories. (The decreased popularity of marriage among young women in the 1980s indicates that there is more at stake than variations in sex ratio.)

7. Before 1977, no data were published on the number of unmarried couples aged 25-34. Therefore I could not present a figure using age groups comparable to the measure of marriage squeeze.

8. According to the U.S. Bureau of the Census (1981), the ratio of cohabitation in 1980 compared to that in 1970 was 9.46 for households where the householder was under 45 and 1.24 for households where the householder was 45 and over. That same ratio comparing 1980 to 1977 was 1.68 and 1.17 respectively.

9. There are, however, serious statistical

problems in testing a theory with annual data for such a short period.

10. For more empirical evidence on the relationship between marriage squeeze and female labor force participation, see Chapters 6 and 7.

11. I owe this point to Deborah Blackwell.

12. But total racial exogamy is limited in the United States. "In 1975, about 4.4 percent of married black men and about 2.4 percent of married black women had partners of a different race, almost always white" (Spanier and Glick 1980, p. 724). This low exogamy justifies viewing markets for services by black and white wives as separate.

13. Guttentag and Secord (1983) similarly argue that lower sex ratios among American blacks than whites account for the former's higher divorce and cohabitation rates.

14. This happened, for example, on the Japanese island of Hokkaido, where men who had been experiencing a shortage of brides organized an agency to bring potential wives from the mainland (*New York Times*, January 3, 1978).