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## Changes in the Gender Gap in Crime and Women's Economic Marginalization

by Karen Heimer

One of the most persistent research findings in criminology is that men commit much more crime than women. This typically is referred to as the gender gap in offending. Many researchers have noted that during the past several decades, women and men have converged in their rates of crime and the gender gap in offending has narrowed. Several explanations of this convergence have been proposed, including the economic marginalization hypothesis, which argues that the gender gap in crime has narrowed because women have experienced increasing economic hardship relative to men. This article reviews research on changes over time in the relative crime of women and men. It presents an analysis of Uniform Crime Reports data on the gender gap in offending from 1960 to 1997 and concludes that there has been an appreciable narrowing of the gap over this period in both property and violent offenses. The article then assesses the evidence in the criminological literature regarding the possible reasons for these changes, including the economic marginalization hypothesis. It then reviews evidence from demographic and economic research regarding the increasing marginalization of women and concludes that changes in the gender gap in crime are consistent with the findings of this research. Finally, the article proposes avenues for extending and refining the economic marginalization perspective.

> One aspect of the gender gap in crime that has attracted significant attention within the research community as well as the media is the observation that the gender gap has narrowed somewhat over time. Several explanations of this phenomenon have been offered, but one of the most widely endorsed today is the economic marginalization hypothesis, which proposes that the reduction in the gender gap in crime is associated with increases over time in the financial instability of women.

The gender gap in crime-with males accounting for much more law violation than females-is virtually a truism in criminology. The relationship holds regardless of whether the data analyzed are arrest rates, victimization incidence reports on characteristics of offenders, or self-reports of criminal behavior. As far as we can tell, males have always been more criminal than females, and gender differences emerge in every society that has been studied systematically. Yet, criminologists have not yet uncovered definitive reasons for the gender gap or gender ratio of crime. The persistence and prevalence of gender differences in offending make the unresolved puzzle of the source of these differences all the more troubling.

One aspect of the gender gap in crime that has attracted significant attention within the research community as well as the media is the observation that the gender gap has narrowed somewhat over time. Several explanations of this phenomenon have been offered, but one of the most widely endorsed today is the economic marginalization hypothesis, which proposes that the reduction in the gender gap in crime is associated with increases over time in the financial instability of women. More specifically, the marginalization hypothesis predicts that when women become more economically disadvantaged as compared with men, women's rates of crime as compared with men's rates will increase. The thesis is inherently comparative in nature, and the concept of economic marginalization refers specifically to the situation in which women's economic well-being is not keeping pace with men's economic well-being-women are becoming more economically disadvantaged relative to men. Some research that invokes the economic marginalization argument focuses on a variant of the hypothesis, maintaining that the narrowing of the gender gap in offending reflects increases in women's crime rates and is explained by increases in rates of women's (absolute) poverty. As I discuss in "Trends in Relative Crime Rates of Women and Men" in this paper, however, recent changes in the gender gap in crime do not always occur because women's crime rates increase;
they may also occur when female crime rates either decline more slowly than male crime rates or when female rates remain constant while male rates decrease.

Only a few studies have assessed the economic marginalization hypothesis directly, and these have provided only partial support. There are compelling reasons, however, to believe that changes in the gender gap in offending covary with changes in the economic well-being of women as compared with men. A large number of social demographic and economic indicators provide evidence of trends in the economic marginalization of women in the United States that roughly parallel changes in the gender gap in crime.

This primary goal of this article is to assess evidence from existing research bearing on the economic marginalization hypothesis. To this end, I first review research on trends in the gender gap in crime (i.e., changes in women's crime rates relative to those of men) and then present recent data on these trends. I then assess the major explanations that have been proposed to account for changes in the gender gap or gender ratio of crime, including the economic marginalization hypothesis. Next, I discuss cross-sectional research on women's crime and poverty, with an eye toward drawing out implications for extending the economic marginalization thesis. I then assess the evidence on the changes in the economic well-being of women in the social demographic and economic literatures and link the major trends reported in this research to changes in gender ratios of crime. Finally, I suggest avenues for further elaborating economic marginalization arguments.

## Trends in Relative Crime Rates of Women and Men

Many researchers have observed that female arrest rates have increased relative to male arrest rates since World War II in the United States (e.g., Simon and Landis 1991). There is some disagreement, however, about the importance of these changes. Some researchers maintain that substantial changes are limited to a few offense categories, such as the less serious crimes of larceny and fraud; other researchers argue that there have been important changes in more serious crimes as well. I review these arguments here and then present data on the relative arrest rates of females and males from 1960 to 1997, demonstrating that there have been important changes in arrests across a number of Index crimes in the Uniform Crime Reports (UCR). However, these trends must be interpreted in light of several measurement issues.

## Measurement issues

Because self-report studies of offending typically focus on juveniles rather than adults, and because even longitudinal self-report studies typically cover relatively short windows of time, researchers interested in examining changes in gender ratios of crime over time have used official measures of crime, such as the UCR arrest data. Problems in using the UCR data are documented extensively (O'Brien 1985). One of the most widely recognized problems with UCR arrest data is that they represent only a small fraction of all crimes committed. Yet, assuming that the degree of underestimation is relatively constant over time, most researchers agree that comparisons of trends in UCR arrest data are reasonably valid. A related issue is that research shows that the UCR arrests are probably better measures of more serious than less serious crimes. Finally, there were changes in the collection of the UCR data in the late 1950s; most recent studies of changes in the relative offending of females and males therefore have used UCR arrest data from 1960 onward.

Another important issue for comparisons of female and male arrests is potential bias in arrest decisions of women as compared with men. Many researchers suggest that the police may show more leniency to women in arrest decisions and that this effect may change over time. Hindelang (1981) shows, however, that data from the National Crime Victimization Survey's incidence reports produce a distribution of sex differences in offending similar to the distribution of sex differences in UCR arrest data. This indicates that if gender bias in arrest decisions exists, it is probably not large.

Beyond issues pertaining to the use of arrest data, early research on changes in women's crime was plagued by several critical methodological problems. Box $(1983,191)$ has enumerated these as follows (see also Steffensmeier and Streifel 1992, 83): First, many early studies failed to take into account changes in the size of the female population; consequently, they could not disentangle changes in women's crime from population growth. Second, few early studies considered changes in men's crime rates and therefore did not recognize that, if both are undergoing similar absolute changes, the relative change in female as compared with male crime could be trivial. Third, some research did not disaggregate women's crime rates into component types, which can mask important changes that occur in some crimes but not in others. Fourth, much of the research has not specified and measured rigorously variables that are predicted to be associated with trends in women's offending. Fifth, few studies have used statistical tests to assess changes in women's crime.

More recent research on trends in women's crime has overcome the first three of these problems by examining specific offenses separately, computing arrest
rates for women that are adjusted for the size of the population of women of a given age, and comparing these to similarly adjusted arrest rates for men. The measures computed from these population sex- and age-adjusted arrest rates assess changes in female offending relative to male offending. A commonly used measure compares the sex- and age-adjusted arrest rates for women with the sex- and age-adjusted arrest rates of the total population (women plus men). This measure captures the proportion of all arrests accounted for by women. A second measure of women's offending relative to men is the sex- and ageadjusted arrest rates for women compared with the sex- and age-adjusted arrest rates for men. This is the gender ratio of offending and is interpreted as the number of female arrests per every male arrest. These two measures are essentially numerically equivalent in the case when the gender ratio is small (i.e., male crime greatly exceeds female crime; the gender gap is large), which is the case for all UCR arrest categories examined in this article.

The last two problems with research on trends in the gender gap in offendingthe lack of statistical tests of change over time and the inclusion of predictors of this change in a statistical model-are addressed by some studies but not others; these issues are discussed further in "Trends in Relative Crime Rates of Women and Men."

## Previous research findings

Simon $(1975,1976)$ conducted one of the earliest studies of changes in gender ratios of crime in the United States, finding convergence in women's and men's UCR arrest rates between 1960 and 1970 for larceny, fraud, forgery, and embezzlement. She reported that the greatest change occurred during the late 1960s (1976, tables 4.5 and 4.7). However, she found that this convergence was confined primarily to white-collar property offending-there was little evidence of change in violent crimes during this period. Noblit and Burcart (1976) similarly find large changes in property crimes during the same period, but they also report a doubling in the arrests of robbery among women (note, however, that their calculations of change did not take into account the figures for the age and sex composition of the population). As was typical of these early studies, both the Simon and the Noblit and Burcart studies examined only female offending and did not consider that the changes they reported also may have occurred among males.

The most extensive work on changes in female arrest rates in the United States is that of Steffensmeier and his colleagues (e.g., Steffensmeier 1978; Steffensmeier and Cobb 1981; Steffensmeier and Allan 1988, 1996). These researchers use population-adjusted UCR arrest data and focus on either gender
ratios of arrests or the proportion of all arrests accounted for by females, as discussed previously. Steffensmeier and his colleagues argue that the changes in female offending vis-a-vis changes in male offending between 1935 and 1990 are small and not substantively important for most offenses (see Steffensmeier and Cobb 1981; Steffensmeier and Allan 1996). However, they report substantial changes in larceny, embezzlement, and fraud. Based on these patterns, Steffensmeier and his associates maintain that changes in female offending have been modest, overall, and have been limited mainly to property offenses.

Other researchers examining population-adjusted UCR arrest data view changes in traditionally "male" crimes as potentially important as well. LaFree (1998, 40-42), for example, finds that the ratio of arrests for female to male robberies, burglaries, and auto thefts increased between 1965 and 1992, narrowing the gender gap in these offenses. Although the rates of male arrests for these offenses continued to be much higher than rates of female arrests throughout this period, LaFree concludes that there has been "modest convergence," with females becoming more similar to males in arrests for robbery, burglary, and auto theft, as well as larceny (42). Similarly, Austin (1982) examines UCR arrest data from the late 1950s to the mid-1970s and concludes that there were substantively important increases in females' contribution to arrests for the serious crimes of burglary, robbery, and auto theft, as well as the less serious offenses of larceny, fraud, and embezzlement. Finally, Giordano, Kerbel, and Dudley (1981) analyze police blotters from Toledo, Ohio, for the period 1890 through 1976 and report evidence of convergence in the gender gap in arrests over this period for minor property crimes, as well as for robbery, burglary, aggravated assault, and other assault.

Because the UCR arrest data cannot be disaggregated simultaneously by sex and race, they cannot be used to ascertain the extent of minority versus white arrests among females. Victimization data on incidents, however, show that there are significant differences across race in women's offending, just as in men's offending (Hindelang 1981). Chilton and Datesman (1987) offer indirect evidence of the race effect in a study that links UCR data on increases in larceny arrests for five large U.S. cities between 1960 and 1980 with census data on the age, race, and gender composition of the cities. They deduce that the bulk of the increase in female arrests for larceny can be attributed to increased arrests of African-American women. By contrast, Steffensmeier and Allan (1988) analyze data collected by the Pennsylvania Uniform Crime Reporting System and find that African-American women are comparable to white women in their involvement in property, drug, and sex-related crimes; however, they find that AfricanAmerican women account for a disproportionately large percentage of violent crime. Although the evidence on race is somewhat inconsistent at this point, it
seems reasonable to suspect that there are important race differences in arrests among women. Unfortunately, because so few studies examine the role of race, and because the UCR arrest data do not contain sex-by-race breakdowns, race differences in the relative offending of women and men will not be addressed in the present article. It is, however, a crucial issue for future research, as I argue at the end of this article in "Toward a More Complete Explanation of Changes in Gender Ratios of Crime."

## Trends in the gender gap in crime, 1960-97

The most recently published discussions of gender ratios in offending present data up through 1992 (LaFree 1998) and 1990 (Steffensmeier and Allan 1996). Consequently, trends in gender ratios of arrests during the 1990s have not been examined to date. However, there have been important changes in the relative offending of women and men since 1990. In addition, inclusion of the 1990s allows for the assessment of longer term trends than was possible in previous research.

Exhibits 1 through 6 are based on UCR arrest data from 1960 through 1997 for select offenses. ${ }^{1}$ The 1960 data are used as the starting point, because this is the year in which the UCR coverage was extended to cover nonurban as well as urban jurisdictions, as discussed above. The data here are unpublished data obtained from the FBI that include data only from jurisdictions that reported 12-month complete data. ${ }^{2}$ The data points presented in these exhibits cover 37 years, which is a longer series than has been analyzed in much of the previous research on trends in the gender gap in crime. Exhibits 1 through 3 depict changes in the percentage of all arrests that are accounted for by arrests of females, which is referred to as female contribution to arrests; exhibits 4 through 6 depict changes in the gender ratio of arrests. All rates are for adults only and are adjusted by the age and sex composition of the population. ${ }^{3}$

There is an upward trend between 1960 and 1997 in women's contributions to arrests for all crimes except murder, which shows a consistent downward trend since the early 1960s. An analysis of each of the individual offenses shows which crimes increased more and roughly when these increases occurred.

First, the percentages of arrests for larceny and forgery accounted for by women increased throughout this period (exhibits 1 and 4), with females accounting for 32.9 percent of larceny and 34.7 percent of forgery arrests by 1997. Recent trends thus continue the earlier trends in the gender ratios of these offenses, as described by Steffensmeier and his associates and other researchers. As exhibit 1 shows, the proportion of larcenies accounted for by women reached a post1960 high point in the late 1970s and then dipped downward before beginning
to move upward again in the early 1980s. Many of the studies discussed above focus on the period before 1975 and thus draw attention to the earlier upward trend, which is somewhat steeper than the later trend in the gender ratio of larceny arrests. An examination of male and female rates separately reveals that increases in the gender ratio of larceny since 1985 occurred because, although larceny declined among both genders, female rates dropped off rather gradually while male rates decreased more sharply. This raises an interesting question: Why has female offending not mirrored the declines in male offending in recent years? The gender ratio of arrests for forgery, by comparison, has increased

Exhibit 1. Female contribution to arrests for property crimes (larceny, forgery, and embezzlement)


Note: Female contribution to crime is computed as [100\{female arrest rate/(female arrest rate+male arrest rate) $\}]$ and is interpreted as percentage of all arrests of persons 18 and over accounted for by females over 18.
Source: Data are unpublished UCR arrest data for 12-month complete jurisdictions, obtained from the FBI.
rather steadily since 1960 . The increase over recent years in the gender ratio of forgery occurs because male rates declined somewhat while female rates increased.

Overall, the increases in the gender ratios of larceny and forgery arrests are substantial. I verify this conclusion statistically by estimating Poisson regression models of change in the gender ratios in larceny and forgery from 1965 to 1995 , a three-decade period. Poisson regression is often useful for modeling

Exhibit 2. Female contribution to arrests for property crimes (motor vehicle theft, burglary, stolen property, and arson)


[^0]count or rate data, particularly when there is a small number of large counts, as in crime rate data (see endnote for details of the procedure). ${ }^{4}$ Estimation of these models shows that the changes in both the gender ratios of larceny and forgery from 1965 to 1995 are highly significant (both $p<0.0001$ ). The results also show that the gender ratio of forgery arrests increased 153 percent between 1965 and 1995 and increased 13 percent between 1985 and 1995 ( $p<0.0001$ ). The estimates also reveal that the gender ratio of larceny increased 46 percent from 1965 to 1995 but only 5 percent during the third decade, from 1985 to 1995 (although this increase is significant at $p<0.0001$ ).

Exhibit 3. Female contribution to arrests for violent crimes


[^1]The percentage of arrests for embezzlement accounted for by women shows a much more dramatic increase, jumping from 16 percent of all arrests for embezzlement in 1965 to an unprecedented 45.1 percent in 1997 (see exhibit 1). Again, this continues a long-term trend noted by other researchers for earlier portions of this series. The results of a Poisson regression demonstrate that the increase in the gender ratio of embezzlement between 1965 and 1997 is dra-matic-278 percent ( $p<0.0001$ ). The increase from 1985 to 1995 alone is 40 percent ( $p<0.0001$ ). This occurs because, despite the fact that arrests of males for embezzlement declined between the late 1980s and 1995, arrests of females

Exhibit 4. Ratio of female to male arrests for property crimes (larceny, forgery, and embezzlement)


[^2]increased. Nevertheless, one should keep in mind that this is a very low rate offense among both genders; in 1997, embezzlement arrest rates for women exceeded only the arrest rates for murder and arson, and for men, exceeded only the arrest rates for arson.

Exhibits 2 and 5 show that there are dramatic increases in the gender ratios of arrest for the more serious property crimes of burglary, motor vehicle theft, stolen property, and arson. In 1960, for example, women accounted for only 3 percent of arrests for burglaries; by 1997, women accounted for nearly

Exhibit 5. Ratio of female to male arrests for property crimes (motor vehicle theft, burglary, stolen property, and arson)


Note: Ratios are population-adjusted rates of female crime to population-adjusted rates of male crime for persons 18 years and older.

Source: Data are unpublished UCR arrest data for 12-month complete jurisdictions, obtained from the FBI.

12 percent of burglary arrests. Previous analyses of trends in the gender ratio have concluded that changes in these offenses were unimportant because they focused on only the earlier years in this series. A Poisson regression analysis shows that the increase in the gender ratio of burglary arrests was 218 percent (or a threefold increase) between 1965 and 1995; the increase from 1985 to 1995 alone was 63 percent (both $p<0.0001$ ). A virtually identical situation exists for arrests for motor vehicle theft ( $p<0.0001$ ). A somewhat similar picture emerges for arrests for stolen property ( $p<0.0001$ ), although women account for a larger chunk of arrests for stolen property than for burglary or

Exhibit 6. Ratio of female to male arrests for violent crimes


[^3]In sum, there has
been statistically significant narrowing of the gender gap in arrests since 1960 for all of the offenses discussed here, with the exception of murder.
motor vehicle theft; there also is less change in the gender ratio of stolen property than the other two offenses during the three decades examined. For all three of these more serious property offenses, the recent jump in gender ratios occurs because there has been a modest decline in men's arrest rates and either a very slight or negligible decline in women's arrest rates. Again, the question here is why female offending has not declined similarly to male offending in recent years.

The gender ratio of arson-which is the least common offense among both males and females in 1997-shows an increase of 84 percent between 1965 and 1995 and a 35-percent increase from 1985 to 1995 (both $p<0.0001$ ). Since 1985, both female and male rates of arson have declined, but the drop in male rates has been more pronounced.

Exhibits 3 and 6 show the changes in the percentage of arrests for violent crimes accounted for by females and the gender ratios of these offenses. Women accounted for fewer arrests for murders over time, because female murder rates declined even more rapidly than male murder rates in recent years. This trend thus is the reverse of all other trends in female-to-male arrest examined here. Arrests for other assault and robbery, by contrast, showed similar patterns to the property offenses, with constant upward trends since 1960 and greater increases from 1985 to 1995 (all $p<0.0001$ ). ${ }^{5}$ By 1997, women accounted for nearly 18 percent of arrests for other assault and 9 percent of arrests for robbery. The increases in the gender ratios of arrests from 1965 to 1995 were 102 percent for other assault and 78 percent for robbery. The recent changes in the gender ratio for other assault occurred because there was a slight increase in female rates whereas male rates were fairly stable. ${ }^{6}$ Recent changes in the gender ratio for robbery occurred because female rates were declining more slowly than male rates.

Finally, the pattern for aggravated assault departs from that of other offenses. Exhibit 3 shows that the percentage of arrests for aggravated assault dropped slightly between 1960 (13.4 percent) and about 1980 (11 percent), climbed slowly until about 1991, and then began a dramatic increase through 1997, when women accounted for about 18 percent of the arrests for aggravated assault. The overall increase between 1965 and 1995 is 41 percent ( $p<0.0001$ ). The recent increase in the gender ratio of arrests for this offense occurs because the increases in female arrest rates were sharper than those in male rates between 1985 and 1995. The impact of these figures is magnified when one
considers that in 1997, aggravated assault was the third most common offense of those discussed here, among both females and males.

In sum, there has been statistically significant narrowing of the gender gap in arrests since 1960 for all of the offenses discussed here, with the exception of murder. Women now account for a nontrivial portion of most property and violent crimes. ${ }^{7}$ For many of these offenses, a substantial amount of change has occurred since 1985, a period that has not been studied fully to date. This recent change in the gender ratio has occurred, generally, because of a decline in male rates coupled with an increase, little change, or a smaller decline in female crime rates. Overall, these patterns raise two intriguing questions: First, what explains the narrowing gender gap in both property and violent crime? Second, why has the difference between the trends in female and male arrest rates become pronounced in recent years? In other words, if social conditions have triggered a decline in male crime rates, why have female rates not mirrored this decline? Answering these questions focuses attention on social conditions and processes that affect women's and men's crime differently (i.e., conditions that vary in their impact on crime across gender). The remainder of this article focuses on assessing possible answers to these questions.

## Explanations of Increases in Gender Ratios of Crime

Researchers studying the narrowing of the gender gap in crime have proposed three explanations-the liberation hypothesis, the economic marginalization hypothesis, and the decay of chivalry hypothesis. I address each of these in turn.

## The liberation or emancipation hypothesis

The explanation of increases in female offending that has received the most attention in the literature is the liberation or emancipation hypothesis, which proposes that women's crime rates have increased with their increasing economic and social independence from men, thereby narrowing the gender gap in offending. The logic of this thesis can be traced back to the statements of early criminologists, such as Sutherland $(1947,100)$, who argued that the gender gap
in crime would be greatest in groups or countries in which the economic and social inequality between men and women is greatest. This general argument was first invoked to explain the reported narrowing of the gender gap in crime in the United States by Rita Simon (1975) and Freda Adler (1975). Specifically, Simon and Adler proposed that increases in female offending between the 1960s and 1970s could be attributed to the increasing liberation or emancipation of women that paralleled the women's movement of the 1960s. The two perspectives diverged, however, in locating the specific source of changes in women's crime. On the one hand, Adler argued that convergence in gender roles and attitudes led to a convergence in all types of crime, including violent and property crime. On the other hand, Simon proposed that the increasing labor force participation of women opened up new opportunities for crime (especially white-collar offenses) in the workplace.

Most empirical research, however, does not support the hypothesized link between the women's movement of the 1960s, women's emancipation, and the decreasing gender gap in crime. There are several major issues addressed in this research. The first is whether there is a link between the timing of the women's movement and changes in female crime. Steffensmeier $(1978,573)$ was the first to take up this issue following the publication of Adler's and Simon's books and showed that changes in female offending vis a vis male offending began prior to the late 1960s, before the time that the women's movement could be expected to have had an impact (for alternative findings, see Austin 1982).

A second issue in research on the emancipation thesis is whether changes in the patterning of certain crimes among females are consistent with the image of the "liberated" female offender. Specifically, Steffensmeier and his colleagues show that the largest increases in female arrests (from UCR) are for larceny-theft, fraud, and forgery; they argue that increases in these offenses are consistent with traditional gender roles and are inconsistent with Simon's version of the liberation hypothesis, that the mass movement of women into the paid labor force opened up opportunities to commit work-related crime (e.g., Steffensmeier 1978, 1980, 1993; Steffensmeier and Cobb 1981; Steffensmeier and Allan 1988, 1996; Steffensmeier and Streifel 1992). Steffensmeier and his associates argue that increases in larceny-theft are most likely due to increases in shoplifting, which is an offense associated with the traditional roles of women as family consumers and caretakers. Similarly, they argue that increases of fraud and forgery mostly are due to changes in writing bad checks, welfare fraud, and credit card fraud. Steffensmeier (1993) and Steffensmeier and Allan (1996) maintain that the most substantial changes in women's offending therefore probably reflect the proliferation of large shopping centers and increased opportunities to steal small portable goods, misuse credit cards, and write bad checks, all of which are consistent with
traditional female roles as family consumers rather than liberated roles of women in the paid-labor market. Consistent with this, Giordano, Kerbel, and Dudley (1981) report that their analysis of Toledo police blotters shows that the great majority of women arrested for embezzlement and fraud in the 1970s had passed bad checks rather than committed a work-related crime.

The argument that increases in women's crime are not due to increases in work-related offending is supported by some research on white-collar crime. Consistent with research on barriers to gender equality in labor markets, Box $(1983,181-182)$ argues that women's participation in work-related crime continues to be much lower than men's because the sex segregation of jobs offers women fewer opportunities to commit white-collar crime. Using data on sentenced white-collar offenders, Daly (1989) shows that sex segregation in the workplace does indeed restrict women's opportunities to commit serious white-collar crime. She reports, for example, that 90 percent of women convicted of bank embezzlement in her sample were in clerical jobs of some kind, and consequently, their offending tended to involve minor sums of money. Forty percent of men convicted of embezzlement were bank officers, by contrast, and thus their embezzlement involved larger sums of money. Moreover, whereas sex segregation in legitimate labor markets curbs women's opportunities to commit serious white-collar crime, corresponding sex segregation in illegitimate or criminal job markets similarly may restrict women's opportunities to participate in organized crime (e.g., Steffensmeier 1983; Campbell 1984; Alarid et al. 1996; Maher and Daly 1996).

Another issue raised in research on the liberation thesis concerns the statistical relationship between trends in female crime and indicators of women's emancipation. There are relatively few statistical time-series analyses of this relationship, and the findings of existing studies are somewhat inconsistent. Fox and Hartnagel (1979) use Canadian data from the 1930s through the 1960s and find that two indicators of women's emancipation-rates of female labor force participation and postsecondary degrees-significantly increase women's conviction rates for theft. They also report that women's fertility rates, which they treat as an indicator of involvement in traditional family roles, reduce female conviction rates over all crimes, as well as for theft. By contrast, Box and Hale (1983, 1984) find little evidence that comparable indicators of women's
emancipation significantly affected women's conviction rates in Britain from 1951 to 1980, once other variables are controlled (such as economic marginalization and criminal justice system variables). Steffensmeier and Streifel (1992) find that higher levels of female labor force participation reduced, rather than increased, the proportion of larcenies and embezzlements accounted for by women in the United States between 1960 and 1985. Overall, the evidence from existing time-series analyses does not lend much support to the thesis that increasing labor force participation among women per se is related to changes in gender ratios of crime.

The liberation thesis also has met with sharp criticism on theoretical grounds from feminist and critical scholars. One of the earliest criticisms is Carol Smart's $(1976,76 ; 1979,58)$ argument that the notion that the women's movement has increased crime represents a "confused and simplistic understanding of the process of emancipation, its influence upon consciousness and social institutions, and its location within and alongside other social and historical developments" (see also Heidensohn 1985, 190-191). Smart explicitly says that working-class women have always worked, so if women's labor is increased by the movement, it is likely the labor of middle-class women in white-collar jobs, which would not explain increases in street crimes. Her work also can be interpreted as implying the following argument, although she does not state it explicitly: Social movements, such as the women's movement, are the outcomes of social, political, and economic conditions; behavioral changes, such as changes in women's crime rates, may be related more directly to these underlying conditions than to the social movement itself. Consequently, changes in female offending may be due to the forces of oppression and domination that gave rise to the women's movement, rather than emerging from the effects of the movement on women's relative emancipation. In other words, the relationship between women's offending and the equality gains due to the women's movement may be spurious. If both changing rates of women's crime and the women's movement itself are outcomes of experiences of women's economic, political, and social oppression, then the finding that female crime rates began increasing well before the onset of the women's movement makes sense.

Another critique targets Adler's liberal feminist argument that the convergence of gender roles led to a convergence in crime, including violence. Specifically, radical and socialist feminist scholars argue that gender must be viewed as the result of power relations and not simply the enactment of roles and formation of masculine or feminine attitudes (Daly and Chesney-Lind 1988, 511). From this perspective, patriarchy is the root source of gender differences in behavior, like crime; gender roles and attitudes are embedded within larger patriarchal structures, of course, but they cannot be adequately understood without reference to the larger structures of male dominance.

Finally, some researchers claim that the liberation hypothesis is undermined by empirical research that finds that the attitudes of convicted female criminals are not liberated (e.g., Steffensmeier and Allan 1996, 472). This is probably the least convincing of the critiques of the emancipation perspective. First, studies of gender roles, gender attitudes, and offending produce mixed findings, sometimes supporting an association between traditional gender attitudes and roles and offending (Shover et al. 1979; Simpson and Elis 1995; Heimer and De Coster 1999) and other times finding no consistent relationship (e.g., Horwitz and White 1987; Giordano and Cernkovich 1979; Widom 1979). This inconsistency likely reflects diversity in the definition and measurement of gender roles and gender attitudes (Heimer 1996); thus, a sweeping conclusion about the relationship between gender roles, attitudes, and law violation is not justified at this time. Second, even if this research did show consistently that gender roles and offending are unrelated, this would not constitute strong evidence against the liberation thesis. Strictly speaking, data on relationships between roles, attitudes, and crime among individuals cannot refute a hypothesis about aggregate levels of women's crime. As Lieberson $(1985,108)$ states, " $[A]$ ssociations on the lower level are irrelevant for determining the validity of a proposition about processes operating on the higher level." Moreover, cross-sectional data on women's roles and behaviors cannot refute a hypothesis about change over time in women's rates of offending.

In sum, the liberation hypothesis has been subject to much criticism and has not been supported strongly by statistical analyses of changes in female crime over time. Most contemporary students of women's crime therefore argue that a more plausible explanation of change in female offending is change in the economic circumstances of women.

## The economic marginalization hypothesis

The economic marginalization hypothesis proposes that the increased financial hardship of women relative to men in recent decades is a root cause of the narrowing of the gender gap in crime (e.g., Box 1983, 199; 1987, 43; Carlen 1988; Messerschmidt 1986; Miller 1986; Smart 1979; Steffensmeier 1980, 1993). As Box (1987, 42-43) argues, "[C]onventional crimes committed by females have increased considerably over the last decade in both the United Kingdom and the United States. The most plausible reason for this is that more women have become economically marginalised.," ${ }^{8}$

As I mentioned at the beginning of this paper, the concept of economic marginalization is comparative in nature and refers to the economic disadvantage of women vis-a-vis men. Thus, the focus is on the relative economic situation of women as compared with men. This includes women's relative poverty, of

> Single mothers, of course, felt the brunt of gender inequality in earnings and
> have had a difficult time supporting their families. This has produced a feminization of poverty in recent decades.
course, but also extends beyond this to include women's relative economic circumstances more generally. For example, if women were more likely than men to be working in low-paid jobs, with no other source of financial support, they would be marginalized economically compared with men on this dimension. Note, however, that some research focuses on a variant of the economic marginalization hypothesis and examines how changes in the absolute poverty rates of women are related to changes in women's crime and gender ratios of crime.

The hypothesis also emphasizes that economic circumstances and crime are dynamic processes, proposing that the gender gap in crime has narrowed over time as women's marginalization has increased. As I noted in "Trends in Relative Crime Rates of Women and Men," gender ratios of arrests sometimes increase when female crime rates are not rising-the gender ratio of arrests can increase when female crime rates are stable or declining, provided that men's crime rates are dropping off more rapidly. Consequently, the economic marginalization thesis can address the question of why the female rates of some crimes have not dropped off as precipitously as the corresponding male rates, as well as the question of why female rates of other crimes have increased more than the male rates.

The economic marginalization hypothesis appears to be most closely linked to the anomie perspective on crime, although researchers rarely discuss its theoretical underpinnings. Women account for an increasing chunk of crime as economic inequality between women and other groups in society increases. This rationale is similar to the argument about inequality and violent crime rates proposed by Blau and Blau (1982). The implication for the individual level is that high levels of inequality-especially ascriptive inequality such as gender and race discrimination-create a sense of relative deprivation and engender frustration, and crime is a natural response.

There is another theoretical explanation of the economic marginalization hypothesis. Specifically, Messerschmidt (1986) offers a socialist feminist theoretical justification for the marginalization hypothesis in his book, Capitalism, Patriarchy, and Crime. He traces the root cause of the feminization of poverty and thus rising female crime to the emergence of the family wage system in the 19th century, which produced the separate spheres of paid labor by men and domestic labor by women. Applying Marxist feminist arguments, Messerschmidt argues that the emergence of the family wage was triggered in part by the needs of capitalism to
maintain a healthy labor force and to reproduce it in the next generation through the socialization of children. In addition, the family wage emerged as a mechanism to maintain patriarchy and male dominance across economic classes. After World War II, however, the family wage system began to erode and women moved into the labor market to supplement their husbands' earnings. But women's paid labor was viewed as secondary to men's labor, was undervalued, and was paid less. Single mothers, of course, felt the brunt of gender inequality in earnings and have had a difficult time supporting their families. This has produced a feminization of poverty in recent decades. Messerschmidt $(1986,87)$ concludes that this economic context is fertile breeding ground for increases in women's property crime, such as fraud and embezzlement.

Despite the lack of clear consensus among researchers about the theoretical underpinnings of the economic marginalization hypothesis, it is invoked quite regularly in contemporary studies of women's crime. For example, Chilton and Datesman (1987) speculate that their findings of race differences in the arrests of nonwhite women are due to the decline in the economic circumstances of young minority women in urban centers, even though they do not have access to data bearing directly on this claim. Moreover, recent reviews of research on trends in female crime by Steffensmeier (1993, 424-425) and Steffensmeier and Allan (1996) discuss poverty as a key factor driving the changes in women's offending.

Only a handful of empirical studies directly examine the relationship between the economic well-being of women and changes in gender ratios of crime, however. There are three studies in criminological journals that assess the relationships between indicators of women's economic marginalization and crime trends using multivariate statistical analyses. Box and Hale (1983, 1984), for example, report that the effects of women's rates of registering as unemployed had some influence on female conviction rates in England and Wales, for the period from 1951 to 1980. They note, however, that their indicator of economic marginalization may be problematic because many unemployed women did not register and the rate of registering may have changed during the period covered (Box and Hale 1984, 481). Steffensmeier and Streifel (1992) use U.S. data from 1965 to 1986 and, in each of their equations, operationalize women's economic marginalization in terms of one of the following indicators: the percentage of households that are female headed, the percentage of women who are unemployed, and the rate of births to single mothers. In separate analyses (each holding constant variables related to women's emancipation), they find the following patterns: changes in the percentage of female-headed households are significantly related to changes in female contributions to arrests for burglary and prostitution, changes in women's unemployment rates are related to trends in female contributions to arrests for larceny and prostitution, and changes in
rates of births to single mothers are related to changes in female contribution to arrests for larceny. As the authors acknowledge, however, their sample size is small ( $N=26$ ). This precludes them from including multiple measures of women's economic well-being in a single equation. In addition, it is possible that relationships that are significant in the population are found to be nonsignificant in the analyses of their sample data.

The studies of Box and Hale and of Steffensmeier and Streifel are important because they represent the first attempts to test the economic marginalization hypothesis using time-series data and multivariate data analysis. Yet, they do not provide definitive answers regarding the status of the hypothesis. First, many of the variables intended to capture economic marginalization measure the absolute poverty of women, rather than their economic well-being as compared with the economic well-being of men. For example, the percentage of women unemployed does not give information about levels of male unemployment and thus captures absolute rather than relative economic status. The analyses of these variables, therefore, provide a test of a variant of the hypothesis but do not assess the prediction about the role of comparative well-being. Second, these studies include only one measure of women's economic well-being in each of their equations (due to restraints imposed by sample sizes). Neither the percentage of women unemployed nor the percentage of female-headed households alone captures the complexity of women's economic marginalization, as I illustrate later in this article.

In sum, the economic marginalization hypothesis offers a plausible explanation for the narrowing of the gender gap in crime over recent decades. The three studies that have tested the hypothesis directly have produced some support. However, more research is needed to understand the precise mechanisms linking changes in the relative economic well-being of women and men with changes in the gender ratio of crime. In the remainder of this article, I take the first step in uncovering these mechanisms.

## Changing criminal justice practices: The decay-of-chivalry hypothesis

Most researchers suggest that at least some of the change in the relative arrest rates of women and men reflects changing criminal justice practices. Specifically, with changing gender roles and attitudes over the past few decades, law enforcement may have become less "chivalrous" and thus more likely to arrest women than it was in the past (see Steffensmeier 1993). Indirect support for this argument comes from analyses of British data that find that official measures of female crime are influenced by the changing sex composition of the police force between 1950 and 1981 (Box and Hale 1983, 1984)
and from an analysis of U.S. data that reports that gender ratios in offending are influenced statistically by increases in numbers of police officers per capita between 1965 and 1986 (Steffensmeier and Streifel 1992). ${ }^{9}$

Yet, given the available data to date, there are at least three reasons to be cautious in interpreting these findings as demonstrating that criminal justice bias substantially affects changes in gender ratios of arrests. (See also arguments by Chesney-Lind $[1989,1997]$ that females are treated more punitively than males in the justice system. ${ }^{10}$ ) First, the measures used in existing studies to tap changing gender bias in criminal justice practices are indirect; they essentially tap changes in numbers and gender composition of criminal justice personnel, not in the attitudes or behavior of personnel. Of course, obtaining direct measures in macro-level research would be extremely difficult, if not impossible.

Second, and more important, the argument that police have become more "liberated" and thus less likely to treat female offenders "chivalrously" by letting them off the hook does not comport well with the actual patterns of women's arrests over the past decade or so. Recall that exhibits 1 through 6 showed sharper increases in female relative to male arrests for many offenses in the 1990s than in the 1970s or 1980s. Explaining this pattern would seem to require a more dramatic metamorphosis in the gender attitudes and behavior of police in the 1990s than in previous years. It seems unlikely that such an abrupt shift occurred. Moreover, a straightforward decay of chivalry hypothesis would predict increasing rates of female arrests, rather than the slight declines or stability that occurred in arrest rates for many offenses since 1990 (described previously in "Trends in Relative Crime Rates of Women and Men"). Stated more generally, the decay-of-chivalry hypothesis has trouble explaining fairly rapid changes in female arrest rates (whether upward or downward). Indeed, attitudebehavior research in social science has shown that group attitudes typically do not shift as quickly as the decay of chivalry hypothesis would require to explain changes in arrest patterns.

Third, as I discussed earlier in "Trends in Relative Crime Rates of Women and Men," Hindelang (1981) finds similar gender ratios in his careful comparison of UCR data with reports on the gender of offenders in the National Crime Victimization Survey. If chivalry leads to less likelihood of arresting female compared with male suspects, then the gender ratios in the UCR data should depart from the gender ratios calculated using victims' reports, counter to Hindelang's findings. Furthermore, it seems likely that at least some of the Part I Index offenses of UCR-such as aggravated assault, robbery, and arson-are serious enough crimes that police officers would be likely to arrest suspects, regardless of gender.

The evidence that decreasing gender bias in arrests accounts for a substantial portion of the increase over time in the proportion of arrests accounted for by females therefore is not overwhelming. However, we cannot rule out completely the decay of chivalry as a factor in analyzing changing patterns of gender ratios of offending. The most judicious conclusion, at present, is that changing gender attitudes and behaviors of police may have some effect on changing gender ratios of arrests, but this does not explain the bulk of the change in the relative offending of females and males.

Indeed, this position is supported by the three empirical analyses of criminal justice bias discussed previously, which all report independent significant effects of women's economic marginalization on the gender gap in offending after measures of changing criminal justice personnel are controlled (Box and Hale 1983, 1984; Steffensmeier and Streifel 1992). Consequently, there remains good reason to think that the economic marginalization of women contributes to changes in the gender ratio of crime. The following sections of this article delve further into the economic marginalization argument, further assessing its potential validity and suggesting avenues for extending the theoretical argument.

## Studies of Women's Poverty and Crime

The economic marginalization of women is a complex phenomenon. Understanding the phenomenon and its relationship to crime requires consideration of the full complement of structural factors that cumulate to increasingly disadvantage women economically, relative to men. In addition, although the economic marginalization hypothesis focuses primarily on aggregate relationships, it would be useful to understand how the structural conditions leading to women's relative disadvantage are translated into crime through group- and individuallevel mechanisms. This section draws on descriptive studies of adult women offenders and on qualitative and ethnographic studies of women's crime and poverty to move toward meeting these goals.

Most of the studies reviewed in this section focus on individuals, many rely on cross-sectional data, most do not examine poverty among noncriminal women, and most do not include comparisons with males (exceptions are Daly 1994 and Steffensmeier and Haynie forthcoming). They therefore cannot speak directly to the question of whether changes in the gender ratio of crime are associated with changes in the economic marginalization of women in the United States. Nevertheless, these studies offer key insights that can be used to push forward research on the relative economic well-being of women and crime, a point to which I return at the end of this article in "Toward a More Complete Explanation of Changes in Gender Ratios of Crime."

## The structural correlates of women's economic disadvantage

As researchers have noted (e.g., Steffensmeier 1993), descriptive studies of women offenders are consistent with the general thrust of the economic marginalization hypothesis because they reveal that most women who enter the criminal justice system are disadvantaged socioeconomically. In addition, these studies offer insights about the specific aspects of economic disadvantage that may be consequential for women's crime. For example, Wolfe, Cullen, and Cullen (1984) analyzed the police records of a medium-sized Southern city for the years from 1969 to 1975 and report that in their sample of 2,507 arrests of women, the typical offender was younger than would be expected given the age distribution of women in the city. She was also African-American and single and had less than a high school education. Only one in four of the offenders was described as unemployed; but, nearly all of those who were employed were unskilled workers (487).

Similarly, Giordano, Kerbel, and Dudley (1981) report that their analysis of police blotters in Toledo from 1890 through 1976 depict the typical female offender in the 1970s as a single, unemployed minority. Furthermore, although the data are incomplete, there is some indication of change over time in the description of the archetypal woman arrestee: From 1890 onward, arrested women were more apt to be nonwhite. Since 1950, arrested women became less likely to be married- 57 percent were unmarried in 1950 and 79 percent were unmarried in 1976. (Although statistics for the general population are not provided, these numbers certainly would exceed those figures.)

Steffensmeier and Haynie (forthcoming) go beyond the research on women offenders to show that several key indicators of structural disadvantage influence female crime rates in a sample of U.S. cities. Specifically, they show that rates of overall poverty, income inequality, unemployment, female-headed households, and the racial composition of cities (collapsed across gender) are associated with female crime rates as well as male crime rates.

Recent ethnographic and qualitative research on women's crime focuses attention on some of the same structural factors. For example, a similar portrait of female criminals emerges in Miller's (1986) study of women street hustlers in Milwaukee (see also Romenesko and Miller 1989), Daly's (1994) research on women felons in New Haven, Maher's (1997) ethnography of women crack cocaine users and sex workers in Brooklyn, Baskin and Sommers' (1998) study of serious and violent female offenders in New York, Campbell's (1984) research on girl gangs in New York, and Carlen's (1988) research on a sample of female criminals in Great Britain. Specifically, these studies emphasize that
most of the women in their research are unmarried and economically marginalized, with limited education and periods of unemployment interspersed with periods of work in low-paying service-sector jobs. For example, Romenesko and Miller (1989) note that the previous jobs of the women in their sample included work as cooks, housekeepers, store clerks, waitresses, and go-go dancers. Baskin and Sommers $(1998,80)$ report that of the women offenders in their sample who were employed, most worked in unskilled jobs as factory workers, salespersons, and office clerks. Daly $(1994,44)$ observes that at the time of arrest, only 8 of the 40 women that she studied were working in legitimate jobs, 16 were receiving welfare benefits, and the remaining 16 had "no clear means of economic support."

Overall, these studies suggest that the dimensions of women's economic circumstances that are associated with female offending are those factors that often are identified as correlates in studies of aggregate crime rates and male offending (e.g., Bursik and Grasmick 1993), namely age, race, family disruption, unemployment, and employment in marginal or low-paying jobs.

## Mechanisms linking women's economic disadvantage and crime

Qualitative and ethnographic studies of women's poverty and crime take us beyond these demographic relationships, to illuminate some potential groupand individual-level mechanisms through which structural aspects of poverty may translate into crime. As in research on crime and delinquency, more generally, these studies focus on neighborhood context, family processes, deviant networks, attitudes, motives, and decisionmaking processes. The specific emphases within these general foci sometimes converge with and sometimes depart from the emphases in other criminological research.

There is a good deal of convergence, for example, between the ways that neighborhood context is addressed in research on poor women's crime and in other research in criminology. Nearly all of the women discussed in the ethnographic literature on women's poverty and crime find themselves living in disadvantaged, disorganized, and deteriorating communities with high rates of drug use, property crime, and violence (e.g., Miller 1986; Baskin, Sommers, and Fagan 1993; Baskin and Sommers 1998). These women tend to be isolated socially as well as economically from mainstream society, paralleling research on aggregate crime rates and male offending (e.g., Shihadeh and Flynn 1996).

There are important points of departure, as well as convergence, in the treatment of family process in other criminological research and studies of women's crime. As in other research on crime, many of the recent studies of women's
crime focus on the events and circumstances that women experienced in their families of origin during childhood. For example, several recent studies report that economically marginalized women offenders often experienced fairly extreme poverty in their families of origin, which disadvantaged them in terms of legitimate avenues and thus contributed to their entry into crime during adulthood (Miller 1986; Carlen 1988; Romenesko and Miller 1989; Daly 1994). Studies of women's crime, however, depart significantly from most other studies of crime by strongly emphasizing the importance of victimization and abuse during childhood. Daly (1994) and Maher (1997), for example, both note that about one-third of the women in their studies experienced physical and/or sexual abuse as children (see also Chesney-Lind and Shelden 1998). Daly, in fact, identifies a subgroup of female felons that she labels "harmed and harming women," who experienced abuse as children in addition to economic hardships. Daly invokes a quasi-psychological argument, maintaining that as these abused girls grew up, they became increasingly violent and committed violent crime when they were not able to contain their rage. According to Daly, these women reproduce their experiences with abuse by acting violently toward others.

Research on women's crime, like other recent studies of crime, also stresses the role of peer processes linking structural disadvantage with offending, especially processes of recruitment into deviant and criminal networks. Specifically, several recent studies suggest that women who live in marginalized communities are more likely to encounter and become incorporated into criminal and deviant networks, which play a major role in initiating them into crime and in sustaining their criminal involvements in the future (Miller 1986; Carlen 1988, 36-38; Romenesko and Miller 1989; Baskin, Sommers, and Fagan 1993). Through these networks, women can be recruited directly into street hustling, or they may get involved in drug use through deviant networks, which then leads to more extensive involvement in criminal networks and crime to support their habits (e.g., Miller 1986; Baskin and Sommers 1998). Furthermore, recruitment into these networks at times occurs within the family, with immediate or extended family serving as the conduit between young women and criminal groups (Miller 1986).

Arguments about criminal attitudes and motives in the literature on women's poverty and crime parallel arguments from other research on crime, by arguing that persons living in disadvantaged structural conditions are more likely to learn definitions (attitudes, motives, etc.) that favor using crime and violence to solve problems. However, research on women's crime has added an important twist on this basic argument, asserting that the meaning of violence may differ across gender. Women may engage more often in violence as a protective
mechanism-in an attempt to counter current victimization by others or ward off potential victimization in the future-whereas men may be more likely to use violence to "do gender" (e.g., Daly 1994; Joe and Chesney-Lind 1995; Maher 1997; see also Messerschmidt 1993). For example, Maher (1997) argues that the women sex workers in her study rob their clients as a way to build reputations for violence, which helps them to divert potential victimization. This argument suggests that the exposure to high levels of violence and potential victimization that typify impoverished neighborhoods may lead women to define violence as a way to protect themselves. ${ }^{11}$ The same process may occur among men, of course, as Anderson (1999) argues. But, the implication of studies of women's offending is that the relationship may be more pronounced among women.

Finally, as in the criminological literature more generally, some studies of women's poverty and crime describe a fairly rational decisionmaking process leading to offending-marginalized women who are confronted with bleak prospects in legitimate labor markets decide to turn to illegitimate opportunities. Carlen $(1988,32)$ argues that most of the crimes committed by the women in her sample were property offenses, often occurring when women on the economic margins saw crimes like shoplifting and check fraud "as the best method of solving their financial problems and gaining some control over their lives." Romenesko and Miller $(1989,110)$ maintain that many of the hustlers they studied saw street crimes as alternative work opportunities that allowed them to feel "productive as women workers." Baskin and Sommers $(1998,145)$ describe the decisionmaking process leading to violence among their sample of offenders as reflecting the "women's experiences and understandings of their immediate environments" within the constraints imposed by structural disadvantage and community decay.

Other research on women's crime indicates that these choices may often be fueled by the desire to take care of others, including children. The decision to pursue illegal avenues to income when legal avenues are blocked appears to be exacerbated when offenders are mothers, especially single mothers. Miller $(1986,85)$ notes that street hustling-which includes prostitution, theft, check forgery, burglary, robbery, and other crimes-is a strategy used by the women in her sample to support their children, as well as themselves. Carlen (1988, 115) notes that having children increases the poverty of unmarried female offenders and leads many to resort to crime to provide food, clothing, and other things for their youngsters. Another study finds that the need to take care of children and others is the primary rationalization for crime given by a sample of women imprisoned for fraud and embezzlement (Zietz 1981). Similarly, a study of offenders convicted of white-collar crimes like embezzlement, postal fraud, credit card fraud, and false claims reports that women were more likely
than men to say that their crimes were motivated by their families' financial need (Daly 1989).

In short, like other studies of crime, recent ethnographic research on women's crime demonstrates that crime is a matter of choice and emphasizes that choices often are constrained by structural circumstances. Unlike men, however, women who decide to commit crime may be more influenced by concern with taking care of families and others. Moreover, at least one feminist study argues that some women actively resist and rebel against structural constraints and the authority structures that attempt to control poor, marginalized women, such as welfare and criminal justice agencies (Carlen 1988). But, because these women are so powerless in the larger social structure, their resistance often results in the loss of services, further regulation, and increased sanctions. This can become part of a downward spiral in which women's extreme poverty and criminal involvement are exacerbated.

I will return to address these group- and individual-level mechanisms linking structural disadvantage with women's crime in "Toward a More Complete Explanation of Changes in Gender Ratios of Crime," where I suggest avenues for further development of the marginalization thesis. Now, however, I turn attention to assessing the key questions of whether the economic marginalization of women has increased substantially over recent decades, and whether the changes seem to parallel increases in the proportion of crimes committed by women.

## Trends in the Economic Marginalization of Women and the Gender Ratio of Crime

Studies of poverty and women's economic well-being in the United States since 1960 suggest that three sets of factors have coalesced to produce increasing economic marginalization of women as compared with men. ${ }^{12}$ First, there have been dramatic changes in the composition of the family. Second, there has been persistent wage inequality across gender (i.e., women's wages have not been on par with men's wages), as well as increasing inequality or dispersion in income among women and men. Third, the welfare "safety net" has eroded consistently over recent decades. Any of these trends alone probably would not have resulted in the increases in the economic marginalization of women that has occurred in the United States; it is their combined impact that is crucial.

Existing tests of the economic marginalization hypothesis, however, have included in each of their statistical equations only a single factor relating to women's poverty and relative economic well-being. In this section, I present a
more detailed analysis of the way that multiple demographic and economic factors may combine to influence trends in women's offending. This level of detail is important because isolated factors that are only weakly or moderately related to women's crime may operate in tandem with other factors to have a much greater impact. Indeed, this section demonstrates that the relationship between women's economic marginalization and crime cannot be understood without acknowledging the complex interplay among various social structural factors.

Toward this end, I discuss major findings from the demographic and economic literatures regarding three categories of structural-level processes that have combined to create greater economic hardship among women than men. These categories are changes in family composition, inequality in earnings, and the decay of welfare. I then show how the combination of multiple factors can be linked to changes in the gender ratio of arrests. The parallels drawn here between specific aspects of women's economic marginalization and crime resonate well with the findings discussed above from ethnographic and qualitative studies of women offenders.

## Changing family composition, women's poverty, and women's crime

The American family has experienced dramatic changes over the course of the 20th century. Compared with the earlier parts of the century, more people are divorced, more children are born to single mothers, and more married women work in the paid labor force (Sweet and Bumpass 1987; Wetzel 1990). ${ }^{13}$ These shifts reflect two important patterns of change in families (see McLanahan and Casper 1995): There has been a substantial increase in dual-earner families, with both men and women working in the paid labor force. At the same time, the number of female-headed households has exploded, reflecting increases in divorce and births out of marriage, as well as a recent trend toward delaying marriage (see Wetzel 1990). Exhibit 7 shows that whereas female-headed households accounted for only 10 percent of all households in 1960, they made up almost 18 percent of households in 1997, with the greatest growth occurring during the 1970s (U.S. Bureau of the Census 1998c, table C-3). This growth in female-headed households has exceeded the growth of all other household patterns in the United States (Rodgers 1996).

The increasing numbers of dual-earner and female-headed families combine with changes in the relative income levels of these families to produce increasing economic inequality across households in the United States. Consider that the median income of dual-earner families was $\$ 34,393$ in 1960 and $\$ 60,669$ in 1997 (in 1997 dollars). Female-headed families had median incomes of \$14,794 in 1960 and \$21,023 in 1997 (U.S. Bureau of the Census 1998a).

## Exhibit 7. Female-headed households as a percentage of all households



Note: Prior to 1979, unrelated subfamilies are included in all households. Beginning in 1979, unrelated subfamilies are excluded.
Source: U.S. Bureau of the Census 1998c.

Hence, although dual-earner families increased their income by roughly 76 percent, female-headed families increased their income by only 42 percent since 1960. This shift in relative income combines with the increasing numbers of dual-earner and female-headed families to increase economic inequality across family types (Karoly 1993).

The picture becomes a bit more complex when we shift the focus from income inequality to relative poverty across household types. Although the poverty rates of all types of households declined during the 1960s, the decline was more gradual among female-headed households than among all household types combined; thus the gap between the poverty rates of female-headed households and other households widened during this period (see exhibit 8; U.S. Bureau of the Census 1998c, table C-3; also Bane 1986). ${ }^{14}$ Whereas the

Exhibit 8. Poverty rates of female-headed households and all households combined

| Year | Absolute poverty rate of female-headed households (no husband present) | Absolute poverty rate of all households | Relative poverty rate of female-headed households* |
| :---: | :---: | :---: | :---: |
| 1960 | 42.4 | 18.1 | 2.3 |
| 1961 | 42.1 | 18.1 | 2.3 |
| 1962 | 42.9 | 17.2 | 2.5 |
| 1963 | 40.4 | 15.9 | 2.5 |
| 1964 | 36.4 | 15.0 | 2.4 |
| 1965 | 38.4 | 13.9 | 2.8 |
| 1966 | 33.1 | 11.8 | 2.8 |
| 1967 | 33.3 | 11.4 | 2.9 |
| 1968 | 32.3 | 10.0 | 3.2 |
| 1969 | 32.7 | 9.7 | 3.4 |
| 1970 | 32.5 | 10.1 | 3.2 |
| 1971 | 33.9 | 10.0 | 3.4 |
| 1972 | 32.7 | 9.3 | 3.5 |
| 1973 | 32.2 | 8.8 | 3.7 |
| 1974 | 32.1 | 8.8 | 3.6 |
| 1975 | 32.5 | 9.7 | 3.4 |
| 1976 | 33.0 | 9.4 | 3.5 |
| 1977 | 31.7 | 9.3 | 3.4 |
| 1978 | 31.4 | 9.1 | 3.5 |
| 1979 | 30.4 | 9.2 | 3.3 |
| 1980 | 32.7 | 10.3 | 3.2 |
| 1981 | 34.6 | 11.2 | 3.1 |
| 1982 | 36.3 | 12.2 | 3.0 |
| 1983 | 36.0 | 12.3 | 2.9 |
| 1984 | 34.5 | 11.6 | 2.8 |
| 1985 | 34.0 | 11.4 | 3.0 |
| 1986 | 34.6 | 10.9 | 3.2 |
| 1987 | 34.2 | 10.7 | 3.2 |
| 1988 | 33.4 | 10.4 | 3.2 |
| 1989 | 32.2 | 10.3 | 3.1 |
| 1990 | 33.4 | 10.7 | 3.1 |
| 1991 | 35.6 | 11.5 | 3.1 |
| 1992 | 35.4 | 11.9 | 3.0 |
| 1993 | 35.6 | 12.3 | 2.9 |
| 1994 | 34.6 | 11.6 | 3.0 |
| 1995 | 32.4 | 10.8 | 3.0 |
| 1996 | 32.6 | 11.0 | 3.0 |
| 1997 | 31.6 | 10.3 | 3.1 |
| * Computed as absolute poverty rate of female-headed households/absolute poverty rate of all households. |  |  |  |
| Note: Prior to 1979, unrelated subfamilies are included in all households. Beginning in 1979, unrelated subfamilies are excluded. |  |  |  |
| Source: U.S. Bureau of the Census 1998c. |  |  |  |

1960 poverty rate of female-headed households ( 42.4 percent) was more than double the poverty rate for all households combined ( 18.1 percent), the 1970 poverty rate of female-headed households ( 32.5 percent) was more than triple the poverty rate of all households ( 10.1 percent). As exhibit 8 shows, the absolute poverty rates of all households combined reached a low in 1973 and 1974, whereas the absolute poverty rates of female-headed households did not change much between the late 1960s and middle 1970s. The relative poverty of female-headed households can be defined as the absolute poverty rates of female-headed households divided by the absolute poverty rates of all households. Viewed in this way, the relative poverty of female-headed households increased from 1960 through the middle 1970s, peaking at 3.7 times the poverty rate of all households combined in 1973. Since that time, the relative poverty of female-headed households has remained fairly stable, hovering around three

Exhibit 9. Percentage of the poor population residing in female-headed families


[^4]> When the stable (but substantial) relative poverty of femaleheaded households is combined with the increasing prevalence of femaleheaded households, the outcome is an increasing percentage of the total poor population in the United States residing in families headed by a single woman.
times the poverty rate of all households. Femaleheaded households are clearly disadvantaged economically compared with other households. A more refined breakdown of household types reveals this relative disadvantage in greater detail: In 1997, the poverty rate for female-headed households was six times greater ( 31.6 percent) than the rate for married couples ( 5.2 percent), and more than double the rate for male-headed households with no wife present (13 percent) (U.S. Bureau of the Census 1998c, table $\mathrm{C}-3$ ).

Because the relative poverty of female-headed households has been rather stable since the middle 1970s, this fact alone cannot explain the increasing economic disadvantage of women. However, when the stable (but substantial) relative poverty of female-headed households is combined with the increasing prevalence of female-headed households noted previously, the outcome is an increasing percentage of the total poor population in the United States residing in families headed by a single woman. ${ }^{15}$ This is the phenomenon typically referred to as the feminization of poverty in the demographic and economic literatures (e.g., Pearce 1978; Bane 1986; Garfinkel and McLanahan 1986; Rodgers 1996). Exhibit 9 shows that the percentage of the poor population residing in female-headed families increased from 18.2 percent in 1960, to 29.5 percent in 1970, to 34.6 percent in 1980, to 37.5 percent in 1990, to 37.9 percent in 1997 (U.S. Bureau of the Census 1998c, table C-1). ${ }^{16}$ The most dramatic increase occurred between 1960 and the late 1970s, and there was a brief decline during the recession of the early 1980s (when persons from other households joined those from female-headed households among the ranks of the poor). During the late 1980s, the percentage of the poor population living in female-headed families increased again, reaching a new high in 1991. Since then, the figure has fluctuated and not shown a clear upward trend. Because both the prevalence ( 45.6 percent of African-American households and 17 percent of white households in 1997) and poverty rates of female-headed households are more pronounced among African-Americans than among whites ( 39.8 percent and 27.7 percent, respectively, in 1997), economic marginalization is especially acute among African-American women (U.S. Bureau of the Census 1998c, table $\mathrm{C}-1$ ). As this discussion makes clear, an analysis of the relationship between the increasing economic marginalization of women and female crime must take into account changes in the percentage of
the poor population residing in female-headed families or the relative poverty rate of female-headed households.

A comparison of the trend in the percentage of the poor in female-headed families (exhibit 9) with the trends in the proportion of arrests accounted for by females (exhibits 1 through 3) indicates a substantial association. Specifically, as the percentage of the poor living in female-headed families increases, women account for more of the arrests for forgery, larceny, embezzlement, auto theft, stolen property, burglary, arson, robbery, and other assault. For example, the steep increase in the percentage of the poor population living in femaleheaded families between 1960 and the late 1970s is associated with an increase in the proportion of robberies and other assaults accounted for by women (compare exhibits 3 and 9). Women's contributions to arrests for larceny, forgery, and embezzlement also increased substantially between 1960 and the late 1970s (exhibit 1). Women's contributions to arrests for burglary and motor vehicle theft climbed during this period, too, albeit more slowly (exhibit 2). Yet, female-relative-to-male arrests for several offenses-particularly more serious property and violent crime (e.g., burglary, stolen property, motor vehicle theft, aggravated assault, other assault, robbery) - continued to escalate through the 1980s and into the 1990s, even though the proportion of the poor population living in female-headed families increased much more slowly during this period than during the previous two decades. This finding suggests that factors other than simply the relative poverty of women may be at work. I discuss trends in other potential structural variables tapping women's economic marginalization later in this paper. First, however, a brief note about the potential causes of increases in female-headed households is in order.

## A note about sources of change in family composition

Given that the feminization of poverty is attributed partially to great increases in the prevalence of female-headed households, it is logical to ask why these increases have occurred. Demographic and economic research examines three hypotheses about the causes of these increases. The first hypothesis emphasizes the fact that rates of female-headship have become especially high among African-Americans. This hypothesis, suggested by Wilson (1987), states that there has been an increasing shortage of marriageable African-American men, due largely to their high rates of unemployment and marginal income levels. There have been numerous tests of this hypothesis. Although most recent studies find some support for this argument, they also concur that declines in the earnings and employment of African-American men explain only a small portion of the decrease in African-American marriage rates (e.g., Mare and Winship 1991; Lichter, LeClere, and McLaughlin 1991; Lichter et al. 1992; Wood 1995).


#### Abstract

Because an increasing percentage of women are the sole breadwinners for themselves and their children (as opposed to living in maleheaded and dualearner households), gender inequality in wages means that these women are worse off economically than single men and couples. Averaging across all women, this results in increasing economic marginalization of women as compared with men.


The second hypothesis is that increasing female employment has led to economic independence, and, thus, women have become less motivated to marry (e.g., Becker 1981; Espenshade 1985). Although some studies support this hypothesis (McLanahan and Casper 1995; Schultz 1994), an accumulating body of research calls the prediction into question (for a review, see Oppenheimer 1997). Contrary to the hypothesis, research finds that poor women are less likely than nonpoor women to marry (Lichter et al. 1992; McLaughlin and Lichter 1997) and that declines in marriage have been most pronounced among the least educated women (Qian and Preston 1993).

The third hypothesis proposed to explain increases in female-headed households is that welfare has created economic dependency and disincentives to marriage among low-income groups (Murray 1993). Again, the weight of the evidence does not strongly support this hypothesis (see Moffitt 1992). The trend toward increasing female-headship has continued even as real welfare benefits have declined (e.g., Garfinkel and McLanahan 1986; Moffitt 1992), and multivariate studies show that the effects of welfare benefits on female-headship are generally small or negligible, and insufficient to account for the dramatic increases in female-headed households (e.g., Ellwood and Bane 1985; Moffitt 1994; Schultz 1994; Lichter, McLaughlin, and Ribar 1997).

In sum, although hypotheses regarding the shortage of marriageable men and welfare disincentives receive some empirical support, neither of these factors appear to account for much of the increase in the rate of female-headed households over the past few decades. Indeed, most of the shift in the prevalence of female-headed households in the United States remains "unexplained" (Mare and Winship 1991).

## Wage inequality, restricted economic opportunities, and women's crime

The above review highlights the facts that there has been a great increase in the prevalence of female-headed households over the past four decades, and an increasing proportion of the total poor population in the United States has been
residing in female-headed families. Yet, the trends in these variables cannot by themselves account for the patterns in gender ratios of crime depicted in exhibits 4 through 6. Moreover, as I noted earlier, the increasing economic marginalization of women encompasses more than increasing poverty. It refers to a decline in the economic situation of women as compared with men, more generally. If, over a period of time, women became increasingly unstable financially as compared with men, they would be increasingly marginalized economicallywhether or not the poverty levels of the two groups changed. Consequently, we must examine social structural factors other than poverty levels to assess more fully the economic marginalization hypothesis of crime; we also must examine factors such as economic opportunity structures and wage inequality and consider how these combine with the changing composition of the family to produce inequality across gender in economic well-being.

A first consideration is inequality across gender in wages, or what is called the gender gap in wages. Women's wages historically have been lower than men's wages for comparable work (Goldin 1990). This phenomenon persists today: In 1997, women working full-time still only earned an average of 74.2 cents for every dollar earned by men (U.S. Bureau of the Census 1998a). ${ }^{17}$ Sex segregation of occupations and the devaluation of women's work appears to account for a sizable chunk of the gender gap in wages (see Treiman and Hartmann 1981; Bergmann 1986; Tomaskovic-Devey 1993). ${ }^{18}$ Women are vastly more likely than men to work in clerical and administrative support positions, domestic labor, and other service occupations; women are unlikely to work in skilled craft, precision production, and transportation jobs (Bianchi 1995). In terms of industrial sectors, women are concentrated more highly in the service industries whereas men are more likely to work in the goods-producing sector, especially manufacturing (Northrup 1990). The gender gap in wages arises because "female" occupations are lower paid than "male" occupations (Bianchi 1995) and, compared with manufacturing, work in the service sector is paid less, is more intermittent, and is more likely to be part-time (see Smith 1984).

Yet sex segregation in labor and gender inequality in wages are persistent and rather stable features of the American labor market. The gender gap in wages has not increased in years; rather it has diminished somewhat (see Reskin and Padavic 1994). By itself, therefore, gender inequality in wages cannot account for women's increasing economic disadvantage as compared with men. Rather, the gender gap in wages must be considered within the context of the surge in the prevalence of female-headed households. Because an increasing percentage of women are the sole breadwinners for themselves and their children (as opposed to living in male-headed and dual-earner households), gender inequality in wages means that these women are worse off economically than single men
and couples. Averaging across all women, this trend results in increasing economic marginalization of women as compared with men. Note that research finds that the contributions of absent fathers to female-headed families typically are insufficient or lacking completely, and thus, on average, do not eliminate the economic hardship of single-mother families (Garfinkel and McLanahan 1986).

The economic circumstances of women are complicated further by another set of economic trends. Although average wages in the United States have increased since the 1950s, the rate of growth slowed beginning in the 1970s and this trend has continued since. In addition, the gap between the incomes of high- and low-wage workers began to increase in the 1970s, creating greater income dispersion or inequality in the United States (Gottschalk 1997). Income dispersion grew rapidly in the 1970s, increased sharply in the early 1980s, slowed somewhat in the late 1980s, and then began to increase again in the early 1990s (see Levy and Murnane 1992; Karoly 1993; Freeman and Katz 1995; Bernstein and Mishel 1997). Economists show that the increases in income dispersion, at least through the late 1980s, are accounted for largely by declines in the wages of workers with less education (e.g., high school diploma) as compared with the wages of college-educated workers (Freeman and Katz 1995; Bernstein and Mishel 1997).

Income dispersion has grown among both women and men over recent decades (Fortin and Lemieux 1997). ${ }^{19}$ Once again, however, shifts in the composition of the American family have combined with economic trends to intensify the aggregate economic marginalization of women. Indeed, some economists find that increases in income inequality combine with the surge in numbers of female-headed households to account for the increases in the U.S. poverty rates between the early 1970s and 1990s (Danziger and Gottschalk 1995; Gottschalk 1997). It may be, then, that dispersion in income is more consequential for female-headed households than for other households.

The situation is exacerbated further because female heads of households are increasingly more likely to be unemployed than all females combined or than males. Exhibit 10 shows that unemployment rates increased between 1970 and 1976, declined slightly, and then began to rise again starting in 1980 to peak in the early 1980s. After 1970, levels of unemployment were consistently higher among female heads of households. At the peak in 1983, 12.2 percent of female heads were unemployed, compared with 9.2 percent of women overall and 9.9 percent of men (U.S. Department of Labor 1998). Whereas rates of unemployment have declined for all three groups since the early 1980s, unemployment among female heads remains high by comparison to all females combined and males. Moreover, the relative unemployment ratios of female heads of households compared with those of the other two groups have increased over

Exhibit 10. Unemployment rates by sex and female-headship

| Year | Female heads of households | All females | All males |
| :---: | :---: | :---: | :---: |
| 1960 | - | 5.9 | 5.4 |
| 1961 | - | 7.2 | 6.4 |
| 1962 | - | 6.2 | 5.2 |
| 1963 | - | 6.5 | 5.2 |
| 1964 | - | 6.2 | 4.6 |
| 1965 | - | 5.5 | 4.0 |
| 1966 | - | 4.8 | 3.2 |
| 1967 | 4.9 | 5.2 | 3.1 |
| 1968 | 4.4 | 4.8 | 2.9 |
| 1969 | 4.4 | 4.7 | 2.8 |
| 1970 | 5.4 | 5.9 | 4.4 |
| 1971 | 7.3 | 6.9 | 5.3 |
| 1972 | 7.2 | 6.6 | 5.0 |
| 1973 | 7.1 | 6.0 | 4.2 |
| 1974 | 7.0 | 6.7 | 4.9 |
| 1975 | 10.0 | 9.3 | 7.9 |
| 1976 | 10.1 | 8.6 | 7.1 |
| 1977 | 9.4 | 8.2 | 6.3 |
| 1978 | 8.5 | 7.2 | 5.3 |
| 1979 | 8.3 | 6.8 | 5.1 |
| 1980 | 9.2 | 7.4 | 6.9 |
| 1981 | 10.4 | 7.9 | 7.4 |
| 1982 | 11.7 | 9.4 | 9.9 |
| 1983 | 12.2 | 9.2 | 9.9 |
| 1984 | 10.3 | 7.6 | 7.4 |
| 1985 | 10.4 | 7.4 | 7.0 |
| 1986 | 9.8 | 7.1 | 6.9 |
| 1987 | 9.2 | 6.2 | 6.2 |
| 1988 | 8.1 | 5.6 | 5.5 |
| 1989 | 8.1 | 5.4 | 5.2 |
| 1990 | 8.3 | 5.5 | 5.7 |
| 1991 | 9.3 | 6.4 | 7.2 |
| 1992 | 10.0 | 7.0 | 7.9 |
| 1993 | 9.7 | 6.6 | 7.2 |
| 1994 | 8.9 | 6.0 | 6.2 |
| 1995 | 8.0 | 5.6 | 5.6 |
| 1996 | 8.2 | 5.4 | 5.4 |
| 1997 | 8.1 | 5.0 | 4.9 |

[^5]time. In 1971, female heads were 10 percent more likely to be unemployed than all females combined; by 1980, they were 20 percent more likely to be unemployed than all females; by 1990, they were 50 percent more likely to be unemployed than females overall; and in 1997, they were 60 percent more likely than women as a group to be unemployed. A similar pattern also emerges in comparison to male unemployment rates, and by 1997, female heads of household were 70 percent more likely than men to be unemployed. From an economic marginalization perspective, it is this increase in relative unemployment that is most important.

In sum, the growing economic marginalization of women over the past four decades likely reflects increases in numbers of women-headed households combined with the following: (1) the gender gap in wages and sex segregation of labor markets, with women being more likely to work in part-time and lowpaying jobs in the service sector; (2) increases in wage inequality, with less educated workers falling farther behind better educated workers; and (3) increases in the relative unemployment of female heads of household as compared with all women combined and with men. As the proportion of femaleheaded households climbed dramatically in the 1970s and 1980s (see exhibit 7), the relative unemployment of female heads of household and dispersion in income across education levels also climbed. Together these trends heightened women's economic disadvantage relative to men. During this same time period, the proportion of arrests accounted for by women increased substantially for many crimes (see exhibits 1 through 6). This was particularly the case for some of the more serious property crimes and some violent crimes. For example, women's contributions to arrests for burglary and motor vehicle theft (exhibit 2 ) and to robbery and aggravated assault (exhibit 3) grew substantially during the 1970s and 1980s. These patterns are consistent with ethnographic crosssectional studies that report that contemporary women offenders are likely to have little formal education, to be unemployed, or to work in low-paying, unstable jobs, such as many of those in the service sector.

In addition, women's contributions to arrests for several serious property and violent crimes (e.g., aggravated assault, other assault, motor vehicle theft, burglary, stolen property) increased sharply through the 1990s. Although the situation is less clear regarding increases in wage dispersion (see Bernstein and Mishel 1997), since 1990, the prevalence of female-headed households has continued to increase (exhibit 7) and the relative unemployment of female heads of households compared with other groups has increased somewhat (exhibit 10). Yet, it is unlikely that the substantial changes in the gender ratios of arrests during the 1990s are explained completely by the more modest increases in female-household heads and their relative unemployment. I return to this issue in "Toward a More Complete Explanation of Changes in Gender Ratios of Crime."

## Changes in welfare and women's crime

Research also has highlighted the impact of changes in welfare on trends in the economic marginalization of women. Specifically, some scholars maintain that the erosion of the welfare "safety net" over recent decades has failed to buffer the financial hardships of female-headed households, and thus, has contributed to the increasing economic marginalization of women (e.g., Garfinkel and McLanahan 1986). In a cogent analysis of changes in welfare policies, Danziger and Gottschalk (1995, ch. 2) highlight the following patterns: Between 1964 and 1968, the welfare system was greatly expanded and benefit levels and spending on all programs increased between 1965 and 1975. At the same time, overall poverty rates dropped-from 19 percent of the population in 1964 to 11 percent in 1973 (U.S. Bureau of the Census 1998a). Unfortunately, the economic slide of the 1970s put a stop to this progress and poverty began to increase again. In addition, the real growth of welfare benefits began to decay by the late 1970s because they did not keep pace with inflation, and program expansion began to stagnate and virtually halted in the 1980s (Danziger and Gottschalk 1995). During this same period, there were important increases in economic inequality and wage dispersion, as discussed previously. In short, at the same time that economically marginalized women and men were falling farther behind, the safety net was shrinking.

The safety net, which has been shrinking as the gender ratio of crime has been rising, now is unraveling rapidly following the welfare reforms in the 1996 Personal Responsibility and Work Opportunity Reconciliation Act. Among other things, this Act requires recipients of welfare to work after 2 years of receiving aid and limits benefits to any given family to 5 years in their lifetime. Supporters of the Act view it as a panacea: They project that it will significantly curb public assistance, increase employment and income, and stem the tide of single-mother families (see Blank 1997). Essentially, supporters predict that the Act will help to ameliorate some aspects of the economic marginalization of women. If women's crime rates are related to their rates of economic disadvantage, as I have argued here, then we can add to the supporters' list the prediction that the reforms will halt the increase in the gender ratio of crime as well.

The chances that welfare reform will stem the tide of female-headed families appear to be small. A large selection of literature on the effects of welfare on the formation of two-parent families among low-income groups is discussed previously in this article, and the weight of the evidence from this research does not suggest a strong connection (see Moffitt 1992). Furthermore, some research suggests that the chances are small that recent welfare reforms will improve the circumstances of the economically disenfranchised, although it is too soon to know for certain. Most experiments with mandatory work programs (prior to welfare reform) have demonstrated that the low-wage work available to most welfare
recipients does not put them much ahead of their former benefits levels and, thus, does not help them to escape poverty (McCrate and Smith 1998). Furthermore, some researchers predict that forcing welfare recipients to take jobs likely will lead to a surge in low-skill workers and therefore a reduction in wages for these jobs (see McCrate 1997). Ironically, then, the recent changes in welfare may well amplify economic inequality among women rather than reduce it. If this proves to be the case, the economic marginalization hypothesis of women's offending would predict continued increases in women's crime.

## Summary of patterns of women's economic marginalization and crime

The above discussion underscores the complexity of the sources of the increasing economic marginalization of women. During the 1960s, increasing rates of female-headed households, high levels of sex segregation of jobs, and increasing dispersion in income combined to produce what has become a long-term trend in the economic marginalization of women. The potentially devastating effects of these trends likely were ameliorated to some extent by the expansion of welfare during the 1960s and early 1970s; nevertheless these efforts did not counteract completely the dramatic economic changes that women experienced as a group. It is not surprising, therefore, that the percent of arrests accounted for by women for larceny, embezzlement, forgery, and, to a lesser extent, burglary and robbery all accelerated during this decade.

During the 1970s, the proportion of female-headed households surged upward, wage inequality across education levels began to climb, the gender gap in earnings persisted, and the relative unemployment of female heads of household compared with other groups increased somewhat. The welfare safety net began contracting at the same time, intensifying the hardships of economically marginalized women. Between 1970 and 1980, there also were substantial increases in the percentage of arrests accounted for by women for a variety of property and violent crimes, including forgery, burglary, motor vehicle theft, and robbery.

The prevalence of female-headed households, wage dispersion, and relative unemployment of female heads of household continued to increase through much of the 1980s. Yet the proportion of the poor in female-headed families declined somewhat during the recession of the early 1980s, presumably because the recession pushed borderline male-headed families into poverty as well. Women's contributions to almost all Index crimes increased, most dramatically for embezzlement, motor vehicle theft, and burglary, and less dramatically for larceny, forgery, robbery, and other assault. There seems to be some association, therefore, between changes in the gender ratio and the demographic and economic trends. Recall that murder is an exception to these patterns. Women's relative rates of homicide have decreased since 1960; the
gender ratio of arrests for homicide have continued to decline in recent years because the decrease in female rates of homicide has been greater than the corresponding decrease in male homicide rates.

During the 1990s, the prevalence of female-headship and relative unemployment of female heads of household have increased. Income dispersion may have increased somewhat, but the evidence for this is less clear (see Bernstein and Mishel 1997). There also has been a drastic unraveling of the welfare safety net during this time, and the percentages of the poor population residing in female-headed families consequently reached post-1960 high points in 1991 and 1995 (although its growth during the 1990s was very minimal compared with the dramatic surges of previous decades). In general, the economic situation of women as compared with men (above and beyond differences in poverty) probably continued to decline. Changes in the gender ratio of arrests for many crimes appears to be associated with these trends. The gender ratio continued its long-term acceleration for most crimes, and jumped sharply for many crimes, including embezzlement, motor vehicle theft, stolen property, burglary, arson, robbery, aggravated assault, and other assault. The sharper increase in the proportion of these crimes accounted for by females likely is not explained entirely by the relatively modest increases in the demographic and economic correlates discussed here, however. Other structural processes are likely at work; I return to this point later. Nevertheless, if the trends in women's economic marginalization continue over the next few years and the association noted with crime persists, the rising percentage of arrests accounted for by women could continue into the next century.

## Toward a More Complete Explanation of Changes in Gender Ratios of Crime

Changes in the economic well-being of women in the United States over the past four decades appear to stem from a variety of variables, such as increases in the prevalence of female-headed households, the persistent gender gap in wages, growth in the gap between the wages of high school-educated and
college-educated workers, increases in the unemployment of female heads of households, and the erosion of welfare. Understanding the relationships between increases in women's economic marginalization and gender ratios of crime, therefore, requires consideration of the interplay between the demographic and economic trends discussed in "Trends in the Economic Marginalization of Women and the Gender Ratio of Crime." Although there appear to be some strong bivariate connections between these trends and changing gender ratios of crime, a description of the more complicated multivariate processes must await assessment using statistical methods.

Beyond this, future research should attempt to specify the mechanisms through which demographic and economic trends are translated into gender differences in crime. As I argued in "Studies of Women's Poverty and Crime" in this article, qualitative and ethnographic work on women offenders offers a starting point by illuminating how neighborhood context, family processes, deviant networks, attitudes, motives, decisionmaking processes, and neighborhood context link poverty to women's crime. Some important themes emerged in this body of research.

First, most recent studies of female criminals highlight the disorganization and deterioration of the communities in which these women live; some studies suggest that the social isolation these women experience combines with their economic disadvantage to create circumstances conducive to crime. Consistent with other research in sociology (Wilson 1987) and criminology (e.g., Peterson and Krivo 1993; Shihadeh and Flynn 1996), some studies imply that geographic and cultural separation from more advantaged segments of society fosters crime among women in disadvantaged and deteriorating communities (see Miller 1986; Maher 1997; Baskin and Sommers 1998). If extremely disadvantaged people have experienced increased social isolation in recent yearswalled off in ghettos and separated from mainstream culture-and if social isolation has a greater impact on women, then this might account for sharp increases in the gender ratios of some crimes since 1990. Many of these increases are more pronounced than recent changes in the relative economic circumstances of women and men, per se.

Moreover, the emphasis on social isolation focuses attention squarely on the role of race, and thus raises questions that should be a priority of future research. To what extent are changes in gender ratios of crime accounted for by changes in the rates of crime by women of color? If minority women contribute largely to changing gender ratios, to what extent are these changes explained by the structural disadvantage versus the social isolation of these women? If social isolation of minorities does contribute to changing gender ratios, what are the precise components of social isolation that have an impact on offending? Because

UCR do not allow for the disaggregation of arrest rates by race and gender simultaneously, answering these questions would require collecting data from a sample of law enforcement agencies, and linking these indicators of structural disadvantage and social isolation in the corresponding jurisdictions.

The ethnographic literature also suggests some mechanisms through which structural disadvantage and isolation might shape the family processes, deviant networks, attitudes, and motives that lead women to commit crime. Our understanding of the relationship between women's economic marginalization and gender ratios of crime would be advanced by research that carefully links these group- and individual-level mechanisms to the demographic and economic correlates discussed in the previous section. Although it would be virtually impossible to obtain data to assess how changes in the economic circumstances of women are associated with changes in family processes, deviant networks, attitudes, and motives, studies could assess the contemporary interrelationships between these factors and the structural correlates. This might suggest some avenues to pursue in further developing links between structural-level and individual-level processes.

As noted in "Studies of Women's Poverty and Crime," studies of women offenders have emphasized particular aspects of group- and individual-level processes that diverge from the traditional foci of criminology. For example, some studies have reported that women offenders, particularly violent offenders, experienced high levels of abuse during childhood and adolescence (e.g., Maher 1997; Daly 1994). In addition, many studies showed that women's crime was often motivated by the desire to provide for or take care of other people, including their children (e.g., Miller 1986; Carlen 1988). Other research has suggested that women's and men's motives for violent crime may differ, with women using violence to ward off potential victimization (Maher 1997) and men using violence to display masculinity and claim gender (Messerschmidt 1993). These studies thus draw attention to variation in the processes leading to female and male offending. Future development of the marginalization thesis could address how the structural correlates of changing gender ratios of crime are associated with variation across gender in these individual-level processes.

In sum, further research is needed to build a more complete explanation of changing gender ratios of crime. One avenue that research must pursue is the development of statistical tests of the contributions of the various demographic and economic trends discussed in "Trends in the Economic Marginalization of Women and the Gender Ratio of Crime," including increases in the prevalence of female-headed households, the gender gap in wages, increases in income dispersion, and increases in the unemployment of female heads of household. A second avenue for research is the elaboration of the theoretical basis of the
economic marginalization thesis by showing how the demographic and economic factors creating women's marginalization influence the group- and individual-level mechanisms that give rise to gender differences in offending. As researchers move forward toward these goals, our understanding of the sources of gender differences in crime, and thus our understanding of the causes of crime more generally, will increase.

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## Notes

1. I focus on major property and violent crimes here, excluding rape and prostitution because the former is a historically "male offense" and the latter is a historically "female offense," at least in terms of police arrest data. I also exclude offenses against families and children because changes in mandatory child abuse reporting laws during the period covered could well account for any observed increases in arrests. I also exclude drug offenses.
2. As LaFree, Drass, and O'Day (1992, footnote 7) note, the published UCR arrest data began in 1974 to include data from jurisdictions with coverage that did not include all 12 months of the year. The data reported here purge data from 12-month incomplete jurisdictions, so as to avoid potential problems in comparing figures pre- and post-1974.
3. The measures used here and presented in exhibits 1 through 6 are computed as follows:


Because the age and gender breakdowns of the populations in the UCR jurisdictions with 12-month complete data are unknown, I use the figures for adult males and females in the U.S. population as a whole, and assume that the ratio of female to male population in the jurisdictions covered by the UCR data are roughly equivalent to the U.S. population ratio. I do not need to adjust these measures for the population figures for UCR jurisdictions
because only the female-to-male population ratio is needed to compute these measures (not the actual numbers of females and males in the population).
4. Conditional on the number of male arrests, male population, and female population, the numbers of female arrests for noncontiguous years $(1965,1975,1985,1995)$ were assumed to be observed values of independent Poisson random variables. A Poisson regression model that allowed for a relationship between log gender ratio (where gender ratio=female population age-adjusted arrest rate/male population age-adjusted arrest rate) and time was estimated using Maximum Likelihood estimation procedures in SAS for each of the types of offenses discussed here. A Normal Linear model is inappropriate in this situation because the mean and variance are functionally unrelated and therefore one needs many observations to estimate error variances and conduct inference. This is not possible with the small sample size used here ( $n=4$ decades). By contrast, because the Poisson distribution has mean equal to variance, it is possible to conduct inference with very few observations, provided that counts are large. Moreover, count and rate data often violate the Normal Linear model's assumption of homogeneity of variance. Count and rate data often exhibit heterogeneity of variance, and larger counts correspond to greater variability. Because this is a characteristic of the Poisson regression model, it is used often for analyzing count and rate data (cf. McCullagh and Nelder 1989; Agresti 1990).
5. Throughout the past 20 years, arrest for other assault was the second most common type of arrest among females, following arrest for larceny. Among males, arrest for other assault was the most common type of arrest from 1991 to 1997; from 1977 to 1990, arrest for larceny was the most common type of arrest, and arrest for other assault was the second most common type of arrest.
6. Changes in domestic abuse reporting laws may have influenced the figures for other assault in some jurisdictions if domestic abuse was reported by police under the category of other assault, rather than under the category of domestic assault (not analyzed in the present study due to changes in reporting requirements). Nevertheless, it seems likely that this would occur regardless of the sex of the offender; any artificial escalation of rates of other assault, therefore, would occur for both males and females. Because the focus here is on the gender ratio, any changes that are due to reporting differences affecting both female and male arrest rates likely would cancel each other out.
7. Some researchers have dismissed the problem of female crime in the past because women accounted for such "trivial" proportions of crimes like burglary and robbery. The recent increases in women's contributions to almost all offenses have resulted in levels that clearly are nontrivial and can no longer be ignored or dismissed.
8. A variation on the economic marginalization thesis is offered by Braithwaite (1979, 235). It specifies that the women's movement encouraged increased expectations of gender equality, yet the objective economic and political causes of that inequality remained intact. The resulting gap between women's reality and their aspirations therefore provides an impetus for increases in women's offending. This argument is consistent with anomie
explanations of crime on the structural level and strain theory explanations on the individual level. This interpretation has not been subjected to empirical testing, according to my review of the literature.
9. Steffensmeier and Allan (1996) suggest that improved record processing in the 1960 s may also have contributed to the increase in female offending. Note, however, that this does not explain changes in female crime since the 1960s, nor does it explain changes in the gender ratio of arrests, as male crime and female crime reporting would presumably occur through the same recordkeeping procedures and processing.
10. Chesney-Lind $(1989,1997)$ maintains that the chivalry hypothesis is misguided, at least with regard to arrests for juvenile delinquency. Specifically, she reports that from the 1970s until the 1990s, girls were more likely than boys to be arrested and processed within the juvenile justice system for minor offenses, particularly status offenses like running away and curfew violations, despite efforts to divert status offenders from the juvenile justice system (1997). She argues that there is a double standard in juvenile justice that reflects a patriarchal concern in society with controlling females, particularly the sexual behavior of young girls (see also Smart 1976, 1979). Consequently, she predicts that girls will be treated more harshly than boys when they commit status offenses. Moreover, she does not view this patriarchal control as changing greatly over time. Research using multivariate statistical methods and controlling for some legally relevant variables, however, finds that girls receive more lenient treatment overall for less serious misdemeanors and there is no gender difference in dispositions for serious offenses (Johnson and Scheuble 1991). One might argue that even if Chesney-Lind is correct and there is reverse discrimination in arrest, it is confined to minor or sexual offenses among juveniles and thus is not relevant for either more serious offenses or adults.
11. However, in a recent comparative study of women's and men's robbery, Jody Miller (1998) observes that the motives given by women and men are rather similar (and thus the meaning of robbery may not be that different across gender), although the strategies used to accomplish robbery differ across gender.
12. Note that much of the annual national data bearing on women's economic circumstances extends back only through the 1960s and the beginning of the Current Population Studies.
13. The divorce rate has doubled since 1960 and rates of births to single mothers have jumped from 21.6 per 1,000 childbearing-age women in 1960 to 44.8 per 1,000 in 1996 (U.S. Department of Health and Human Services 1996, 1998; Ventura 1995).
14. These figures refer to households with and without children present. When households with children under 18 years-which are referred to as families, by conventionare considered, poverty rates are increased for both female-headed and all families combined (U.S. Bureau of the Census 1998b, table C-3).
15. Bane $(1986,218)$ decomposes the change in the proportion of the poor living in female-headed households from 1959 to 1979 and shows that slightly more than half of the change is due to the increasing numbers of female-headed households, although somewhat less than half of the change is due to the increasing poverty of these households vis-a-vis other households.
16. Female-headed households are household units, with or without children under 18 present. Female-headed families, by comparison, are household units with children under 18.
17. There also is a race gap in wages-in 1997, Hispanic women earned only 75 percent of white women's wages and African-American women earned 87 percent of white women's wages (U.S. Bureau of the Census 1998b). Race and gender thus combine to doubly disadvantage women of color.
18. The gender gap in wages has been attributed to both the human capital of women (i.e., characteristics related to productivity, such as education, experience, and effort) and to discrimination and sex segregation in labor markets (England 1992; Marini 1989). Some research suggests that sex differences in human capital account for only a small fraction of the gender gap in earnings (e.g., Bielby and Bielby 1988; Tomaskovic-Devey 1993). Sex discrimination in pay for the same work also appears to account for little of the gender gap in wages (see Reskin and Padavic 1994).
19. A study of gender differences in the source of these changes reports that about onethird of the increase in dispersion among women between 1979 and 1988 can be traced to the declining value of the minimum wage; by contrast, the value of the minimum wage accounts for less of the dispersion in men's wages (Fortin and Lemieux 1997, 88). This finding most likely reflects the overrepresentation of women in service-sector jobs, which are more likely to pay minimum wage than jobs in other sectors.

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[^0]:    Note: Female contribution to crime is computed as [100\{female arrest rate/(female arrest rate+male arrest rate) \}] and is interpreted as percentage of all arrests of persons 18 and over accounted for by females over 18.

    Source: Data are unpublished UCR arrest data for 12-month complete jurisdictions, obtained from the FBI.

[^1]:    Note: Female contribution to crime is computed as [ $100\{$ female arrest rate/(female arrest rate+male arrest rate) $\}]$ and is interpreted as percentage of all arrests of persons 18 and over accounted for by females over 18.
    Source: Data are unpublished UCR arrest data for 12-month complete jurisdictions, obtained from the FBI.

[^2]:    Note: Ratios are population-adjusted rates of female crime to population-adjusted rates of male crime for persons 18 years and older.

    Source: Data are unpublished UCR arrest data for 12-month complete jurisdictions, obtained from the FBI.

[^3]:    Note: Ratios are population-adjusted rates of female crime to population-adjusted rates of male crime for persons 18 years and older.

    Source: Data are unpublished UCR arrest data for 12-month complete jurisdictions, obtained from the FBI.

[^4]:    Note: Prior to 1979, unrelated subfamilies are included in all households. Beginning in 1979, unrelated subfamilies are excluded.
    Source: U.S. Bureau of the Census 1998c.

[^5]:    Note: Unemployment rates are for the civilian population, 16 years and older.
    Source: U.S. Department of Labor, Bureau of Labor Statistics 1998.

