REVERSAL OF BLACK PROGRESS IN THE 1980S:
AN ANALYSIS OF THE BLACK WHITE FAMILY INCOME GAP

by

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For Boo, Chaul, and the rest of the crazy but intelligent Fuller Clan. We may be poor in wealth but we certainly are rich in character!
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ABSTRACT

Well known economists claim the era of labor market discrimination against blacks has come to an end, especially between workers of the same skill and age cohorts. On this basis, they argue that Affirmative Action and other anti-discrimination measures are unnecessary and therefore constitute forms of 'reverse discrimination.' However, these arguments are often based on analyses of individual male earnings, which taken alone, serve as insufficient comprehensive indicators of the relative economic status of blacks in the U.S. When compared, data on individual earnings and family income give quite contradictory impressions of black progress. While the individual earnings gap seems to have been decreasing (a trend that seems to have broken down over the last decade) the black-white family income gap been growing steadily since the mid-1970s. What are the main sources of this income gap and how do they relate to differences in black and white family structure and labor force activity?

I argue that total family income is a better indicator of black economic health, because it depends on the earnings of each family member as well as on income from property and transfer payments. As such, it captures the combined effects of several trends, such as earnings, labor force participation, unemployment and changes in family structure.

The central purpose of this study will be to identify and compare the main sources of income inequality between black and white families, for 1979 and 1987, using data from the 1980 and 1988 CPS. Adapting the methodology developed by Cordelia Reimers (1984), I first classify total mean family income by six major sources: earnings of husbands, wives, single female heads, single male heads, other family members and non-labor income. Second, I analyze both female and male earnings for potential sources of intergroup differences: family structure, labor force participation, hours worked per week, and wage rates. I then compute ratios of means to determine where overall income gaps arise.
I found that lower wages and lower labor force participation rates were a consistent source of earnings inequality between black and white family earners. I conclude that these factors are more important than differences in family structure because they would exist, as would the family income gap, even if black and white family structures were the same.

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CHAPTER 1: INTRODUCTION
1.0 This chapter serves as an introduction to the problem of using individual earnings instead of family income as an indicator of black progress. It gives brief summaries of my methodology, hypothesis and findings as well as what will be covered in each chapter.

1.1 CONFLICTING INDICATIONS OF BLACK PROGRESS

Between the late 1950s and 1975, especially during the late 60s, working blacks made considerable progress in terms of relative occupations, earnings and income. These improvements beckoned a flood of claims that racially motivated employment discrimination in the United States had come to an end. One group of economists attribute the convergence of earnings and income to the Civil Rights Movement and Affirmative Action. For instance, Freeman (1973a,1973b, 1978) proclaimed that the Civil Rights Act and Affirmative Action brought about a "virtual collapse" in labor market discrimination against blacks. Wilson (1982, 1987) argued that Civil Rights and Affirmative Action were so effective in creating a privileged strata of middle income blacks that class had become more significant than race in determining economic outcomes.

However, a second line of argument emphasizes the convergence in human capital characteristics as the main force fueling the improvement in earnings. Proponents of this view assert that Civil Rights and Affirmative Action played no significant role in black advancement. Instead, they attribute these improvements to a steady, long term, convergence in black and white skill levels, which are due in turn to long
term steady improvements in the quality and quantity of black education. Their arguments eschew racial discrimination in the workplace as a significant determinant of black employment and earnings, and they presume a trend of steadily decreasing black-white earnings differentials, especially among younger workers of commensurate skill and education levels (otherwise known as the 'vintage effect' espoused by Smith and Welch, 1977, 1978, 1986).

Indeed, these very arguments currently serve as the philosophical basis for claims that Affirmative Action is no longer necessary. However, there are two main reasons why these arguments claiming the end of labor market discrimination are both faulty and misleading. First, the fact that most of these arguments are based solely on analyses of individual earnings data for working men presents a serious problem. Although the male racial earnings gap is important, data on individual earnings alone is insufficient as a comprehensive indicator of the relative economic status of blacks in general. Restricting analysis to this one measure does not capture the combined effects of unemployment, low earnings, low labor force participation rates, changes in family structure, and restricted access to various sources of income such as property, stocks etc. Second, recent studies show that convergence trend in black-white male earnings, so often touted as evidence proving the collapse of labor market discrimination against blacks, has broken down over the last
decade. (Bound and Freeman 1990, Darity and Myers 1988, Cotton 1989)

1.2 INDIVIDUAL EARNINGS VERSUS FAMILY INCOME AS MEASURES OF ECONOMIC HEALTH

While analyses of individual earnings are important, Darity and Myers suggest that "...individual earnings data and family income data can lead to quite different implications about trends in the relative economic status of blacks in the United States." (pp. 11) For instance, while individual earnings data ostensibly showed a steady erosion in the racial earnings gap since 1964, blacks have been experiencing a steady decline in black white family median income ratios since the 1970s (Cotton, 1989). In a recent study of black economic indicators, Cotton points out these contradictory trends. According to census data, the traditional measures of family resources, income wealth, "...appear to be at variance with claims of economic progress. In 1967, the average black family income was $16,594 (in 1987 dollars) while the average white family's income was $28,028. This means that for every $1 of white family income blacks had 59 cents. By 1975, black family income had improved relatively faster than that of whites, $18,583 versus $30,128. For every $1 of white income the black family had 62 cents. In 1987 however, black median family income had declined to $18,098 while white income had increased to $32,274, and for every $1 of white family income in 1987 a black family had just 56 cents." (Cotton, 1989)

As this observation of the data indicates, black families actually lost ground relative to white families between 1967 and 1987 in terms of family income. Black median family income
had grown only 9% between 1967 and 1987, while white family income grew by 15%. Along with an increasing gap in family incomes, blacks have also been experiencing a dramatic increase in the number of black female headed families (since the 1950s); a steady increase in the number of children living in poverty; chronically high rates of male unemployment; an increasing racial unemployment gap; declining labor force participation rates for black males, and slowdowns in growth rates of labor force participation for black females.

What causes these enormous disparities in family income? Have the causes remained the same over the last decade? What is the relationship between the widening family income gap and trends in unemployment, labor force participation and family structure? As Darity and Myers (1988), Reimers (1984), Cotton (1989) and Albelda and Tilly (1990) have shown, differences in black-white family income are the outcome of differences in family structure, and different levels of labor force activity for different family members, as well as differences in wage rates and non-labor income. Therefore, the focus of my study will be to measure the sources of the family income differential, determine which sources are the most important contributors to the gap, and see how these sources have changed over the last 10 years.

Family income is a much better indicator of the black population's relative economic health, and is more effective as a comprehensive measure because it captures the combined
effects of the labor market activities of several members (men, women, other income earning family members). Family income is a measure which allows us to assess the relative status of black families, and the resources available to them as reproductive social units.

By analyzing how differences in family structure, labor force participation rates, weeks employed and wages rates contribute to the earnings gap, and how these contributions have changed over time, we can gain a better grasp of the synergistic effects of several different trends on the economic health of black Americans.

1.3 SUMMARY OF FINDINGS

I have found that although differences in family structure do make a significant contribution to the black-white family income gap, an even more pervasive and consistent factor was lower wages and lower labor force participation rates. Every source of earnings for black families suffer from lower hourly earnings, relative to their white counterparts. The problem of lower wages is most acute for black males, who experienced significant wage declines the 8 year period under study. Every earnings source for black primary families also suffers from lower labor force participation rates. This problem is especially acute for black wives who have traditionally been a large source of black family income and who have also historically maintained higher labor force participation rates than their white counterparts. The results of my study
indicate that although black wives' (in primary families) labor force participation rate increased between 1979 and 1987, it did not increase as fast as that of white wives. As a result, their labor force participation rates dropped a few percentage points behind those of white wives (in primary families), eroding the earnings advantage they have managed to maintain over the last few decades.

I conclude that although differences in family structure are important contributors to the black-white family income gap, they are not as pernicious as the consistent earnings inequality between black and white men and women, which would still exist even if there were no differences in family structure between the two groups.

1.4 CHAPTER DESCRIPTIONS

Chapter Two reviews the literature on black family income, and presents the theoretical framework adopted in this study. Chapter Three describes the data set and decomposition method. Chapter Four contains an analysis of the results, while Chapter Five contains a discussion of the results, conclusions and policy implications.
CHAPTER 2: LITERATURE REVIEW AND THEORETICAL FRAMEWORK
This chapter reviews the literature on the subject of black family income and presents the theoretical framework adapted in this study.

WHAT OTHERS HAVE SAID ABOUT THE PROBLEM: Three Ways of Explaining the Black-White Family Income Gap

Studying family income is both a difficult and rewarding task. It is difficult because in order to properly understand family income, we must place it in the context of several other social and economic trends. It is rewarding because in the final analysis, family income reflects (quantifies) the combined effects of these trends and serves as a comprehensive measure by which to gauge the relative economic progress of different groups.

The literature on family income reflects three ways of explaining the widening black-white family income gap. While all three emphasize the relationship between family structure and income inequality, the first two (Moynihan 1965, Smith and Welch, 1986, Darity and Myers 1988, and Wilson, 1982) focus on the increasing prevalence of female-headed families as the main determinants of black socio-economic status, while the third (Reimers, 1984) focuses more on roles that relative wages, unemployment, and labor force participation for both males and females play in determining family income inequality.

One of the first explanations for the decreasing economic fortunes of black families suggests that blacks' lower socio-economic status is due to a "crisis" in the black family.
According to this view, (made popular by Moynihan in the 60s) the declining economic success of blacks Americans is linked to a breakdown in black family structures (increasing prevalence of female headed families). The breakdown in black family structures is, in turn, due to a deterioration in blacks' morals, culture and value system, which results in decreasing rates of marriages, more unstable families, higher numbers of unwed pregnancies and more families headed by single mothers. The policy prescription for this mode of analysis would focus on changing black values, discouraging the formation of female-headed families and increasing marriage rates among blacks.

A second line of argument, taken by Wilson (1982) and Darity and Myers (1988) also relates the increasing black white family income gap to the increased prevalence of female headed families. However, proponents of this approach attribute the increasing proportion of black families headed by single women to, as, as Wilson terms it, a decreasing pool of marriageable (employed) black males or as Darity and Myers put it, the "economic marginalization of black males". According to these arguments, the economic and social plight of black males (high unemployment, non-employment, and various forms of institutionalization, drug abuse and mortality) has resulted in a declining number of marriageable males (meaning employed males). This, in turn, has fueled the proliferation of families headed by single, black women. Policy prescriptions
following this line of reasoning might recommend that solving the employment problems of black males will lead to the formation of more stable families, which would, in turn, raise black family incomes.

A third mode of analysis, used by Reimers (1984) focuses not only on the relationship between family structure and family income, but also on the role that intergroup differences in wage rates, labor force participation, and unemployment play in determining family income inequality. This analytical framework overlaps with the previous one in that it evaluates the relationship between the employment and earnings situation of black males and family income. However it differs in that it does not restrict its focus to just two factors (i.e. family structure and male earnings). Policy prescriptions flowing from this analytical approach might include measures to improve the labor market status and earnings of both black men and women, and accommodate changes in family structure, instead of focusing just men or women. To better illustrate the nature of these arguments, and how they overlap, contradict and/or confirm one another, I will explore the relevant literature, more in depth.

Several scholars have recognized the importance of intergroup differences in family structure and labor force activity in determining family income. Nevertheless, economists James Smith and Finis Welch (1986) argue that family income is a terrible indicator of black economic
progress precisely because black family structures have undergone considerable transformation, compared to white families. In their study on black progress commissioned by the Rand Corporation, Smith and Welch (1986) acknowledge the fact that family income and male income reflect divergent trends. However, they suggest the increasing black-white family income gap is not symptomatic of declining labor market prospects for blacks, but a reflection of problems endemic to the black family as a social and cultural institution:

"The lack of recent improvement in black family incomes is a reflection of a growing problem in the black family, not of a decline in black labor market prospects." (Smith and Welch, 1986 pp. XXV)

The increase in the proportion of black families headed by single women since the 1950s has indeed been dramatic. As Cotton (1989) points out, in 1950, 17.6 percent of all black families were headed by females compared to 8.6 percent of white families. By 1970, 28.3 percent of black families were headed by females, while the percentage of white female headed families rose to 9.1 percent. By 1987, 42.8 percent of black families were headed by females, while the percentage of white female headed families rose only 3.8 points to 12.9. However, Cotton also questions whether the growth in the proportion of female headed households is the only reason for the mid 1970s decline in black family income ratios, because the bulk of this decline took place before 1977. Instead, Cotton contends
that what appears to have happened is a decline in the income of black female headed families, relative to other types of families. "Between 1977 and 1987 black female headed family income relative to white female headed income fell from .64 to .57. It fell relative to the incomes of white married couple families from .31 to .28." (pp.814)

This decrease in female headed family income, Cotton argues, is the direct result of the changing composition of black female headed families themselves.

"In 1970, the majority of black female family heads were 'married' or 'separated' (and the majority of whites were 'widows'). By 1987, most black female heads of family were 'single' (while most whites were 'divorcees') Thus, over time more and more black one parent families are headed by single women and white one parent families are headed by divorcees. The average income of single women in 1987 was only 59% that of divorced women." (pp.814)

Thus the literature on the subject indicates that not only is the increasing prevalence of female headed families an important factor in the decreasing black white family income ratio, but that the changing composition of female headed families is also key for understanding this decline. However, relating the increasing prevalence of black families headed by single women to declining black family incomes leaves yet another question unanswered: what is causing the dramatic increase in the number of black families headed by single females?

Smith and Welch bypass family income as an indicator of black economic health, precisely because of differences in
family structure. They focus, instead, on the relative earnings, wages and income of males, as if there were no relationship between the two phenomena (family structure and male earnings). However, several other scholars argue that the economic plight of black males is inextricably linked to the increase in the number of families headed by single women.

Darity and Myers (1987) explore this question in depth and argue that the changing structure of black families is directly related to and caused by a declining supply of marriageable black males. In their paper, Darity and Myers demonstrate that increases in female headed families is directly related to reductions in the ratio of unmarried males in the labor force to unmarried females. In this study Darity and Myers adopt a "macro-sociological framework" based on prior research on blacks and incarceration to suggest that "...crime, homicides, drugs and imprisonment were at the heart of the decline in the supply of marriageable males." Darity and Myers also sought to understand the relationship between declining pools of marriageable black men, welfare, family and the widening inequality of black and white family income. Their hypothesis is that the "marginalization of black males" is at "...the core of the dual problem of rising female headship and declining labor force participation." (Darity and Myers, 1988) Darity and Myers marginalization theory is based on the work of Sampson (1987) and Tucker and Mitchell-Kernan (1987) who argue that the marginalized are
"...increasingly young black males who are being withdrawn from the productive labor market through institutionalization and are in jails, mental hospitals and prisons. These black men are institutionalized through dependency on potent dangerous drugs like PCP and highly addictive forms of cocaine; through criminal violence often the result of black-on-black attacks related to drugs and thefts; through diseases and injuries that normally are not life threatening to healthy young men; and finally through excessive rates of mortality, often as a result of homicides." (Darity and Myers, 1988)

According to this theory, the reductions in marriageable mates (the economic marginalization of black males) has severe consequences for family formation. William Julius Wilson's (1982) position supports this hypothesis. He argues that black male joblessness is what lies at the core of black family deterioration. According to Wilson, male joblessness leads to fewer marriages and fewer marriages means that fewer blacks have the opportunity to benefit from economically stable families. In Wilson's opinion, this process is one of the primary factors fueling the polarization within the black population between the poor and the middle class. Overall, Darity and Myers conclude that the "...changing sex ratios among blacks signals a process of marginalization of black males. The declining relative supply of black males symbolizes the declining social status of the black male. And, the numerical deficit in marriageable black men now appears to have deleterious consequences for the movement toward racial parity in economic fortunes of black and white families." (pp. 30)
However, recent research by David Ellwood (1990) tests the hypothesis that the sharp decline in marriageable (employed) black males is the major reason why marriage has fallen sharply among black Americans. According to this study, there is little evidence to support the hypothesis that the declining pool of marriageable men has led to more female headed families. Ellwood bases his conclusion on the following evidence. Between 1980 and 1988, the number of employed black males per 100 black women rose, even though marriage rates continued to fall. The vast majority of the decline in overall marriage rates among black men between 1980 and 1988 were traced to declines in marriage among the employed, not the unemployed. Even though labor market success and failure had a major influence on a young male's likelihood to marry, changes in employment patterns over time were not large enough to explain much of the decline in marriage among black men and women. According to Ellwood, weaker employment earnings only explains about 10 to 20 percent of the decline in black marriages. He therefore doubts whether the declining fortunes of young black men can explain more than a fraction of the declines in marriage.

These findings suggest that one cannot simply reduce the causes of lower black family income to the following causal relationship: decreasing number of marriageable males => declining incidence of black marriages => increasing number of female headed households => lower family incomes. The problem
is much more complex. Although income inequality is related to differences in family type, family structure, in and of itself, does not determine income inequality. In her article on household composition and poverty, Bane (1986) stresses that female headship is not in and of itself a primary cause of poverty. She points out that even though a large proportion of black female-headed households are poor, most of the women were poor even before they became female heads. Bane's study shows that less than half of the poverty of female headed households arises simultaneously with changes in family composition. For blacks, less than one fifth of the poverty of female headed households accompanies changes in family structure. (Moss, Tilly, 1990) This suggests that something other than or in addition to family structure is causing declining black family incomes. Jennings, (1990) who points out that significant inequality exists between black and white single female family heads, also supports this position.

What does determine family income inequality is the combined effects of the labor market activity of several family members. Therefore, family structure is important only insofar as trends affecting the earnings and employment of men and women cause certain family configurations to be less lucrative than others. Cordelia Reimers (1984) is one scholar who recognizes the importance of differential rates of labor market activity for family members as well as differences in family structure in determining family income. Using the 1976
Census Survey on Income and Education, Reimers identified the sources of family income differentials between blacks, Hispanics and whites. Reimers' methodology involved classifying total family income by source (earnings of male head, female head or wife, other family members and non-labor income) and then analyzing male and female earnings by factors such as labor force participation rate, weeks worked, hours worked per week and hourly wage. Reimers found that lower wage rates were the most significant factors contributing to lower average family incomes among blacks and Hispanics, even after adjusting for demographic differences. She also found the greater prevalence of female headed families to be one of the most significant factors contributing to the lower family income of blacks. The fact that black male heads made the smallest contribution to family income, compared to whites, Mexicans, Cubans, Puerto Ricans, Central and South Americans and other Hispanics underlines this phenomenon. While Reimers' findings seem to support the hypothesis that the erosion of the black-white median income ratio is directly related to the increasing prevalence of black families headed by women, they also demonstrate that differences in labor force characteristics such as wage rates, labor force participation rates as well as weekly and daily work rates are equally important sources of family income differences. However, Reimers' study does not examine the effect that trends in the labor force activity of black men and women over the last
decade have on family income. My study adapts Reimers' methodology and adds a time dimension to it by decomposing the black-white family income gap for both 1979 and 1987. This strategy allow us to assess how changes in the labor force activity of black family members has affected the black-white family income gap. Therefore, examining the labor market trends of black men and women, in light of recent transformations in the American labor market and its institutions, will increase our ability to understand the several forces converging on the income generating ability of the black family.

2.2 ECONOMIC RESTRUCTURING FROM 1970s TO THE PRESENT

Economic shocks like the energy crisis of the early seventies, combined with increasing international competition and changing production technologies and markets combined to stimulate a series of transformations in the American economy, frequently termed "economic restructuring". Although the term has become a somewhat vague and cliché, it generally refers to transformations that have occurred in the way firms have been organizing and deploying labor and capital in response to competitive pressures over the last two decades. While my intention here is not define or describe this process in depth, I will provide a brief description of various organizational and institutional changes that affect the labor
market prospects of black men and women, and by implication, the economic health of the families of which they are a part.

Part of the economic restructuring process has involved the "deindustrialization" of several urban areas, mainly North Eastern and North Central industrial centers where blue collar manufacturing was highly concentrated. In response to decreased demand and high labor costs, companies shut some plants down completely, and relocated others to areas harboring cheaper labor costs (i.e. offshore). New investments have been increasingly concentrated in the "sunbelt" and in suburban areas. Since blacks are heavily concentrated in urban areas experiencing industrial exodus, they often hardest hit by blue collar job loss. Often, proliferation of service jobs in these areas do not replace those lost in terms of pay and stability. (Bluestone and Harrison, 1988)

Another part of the restructuring process involves firm reorganizations after mergers and takeovers. According to an article on the subject by Johnson (1987), several years worth of black gains in job placement and promotion, partially stimulated affirmative action, have been wiped out by layoffs occurring during corporate restructuring over the last 10 years. This is because blacks, along with older workers, are often concentrated in positions which are the first to be eliminated during the "streamlining" or "downsizing" process. As Johnson writes,

"...Blacks in the middle and senior management positions are now facing difficulties trying to move ahead for two reasons.
First, many middle management positions are being eliminated because of downsizing, restructuring, or mergers and acquisitions. And because they have tended to be placed in certain kinds of staff positions that are frequent budget cutting targets, and often do not have the seniority of many white managers, blacks are feeling a disproportionate share of the crunch."

A third trend that has intensified since the 70s has been the expansion of the service sector, accounting for most of the job growth in the economy over the last decade. A large portion of jobs in the service sector are characterized by low wages, low skill, and low mobility. Blacks have become increasingly concentrated in this sector, especially after deindustrialization. The expansion of the service sector has been accompanied by proliferation of part-time and temporary employment. Evidence also suggests that secondary part-time employment, characterized by low skill, low pay, few fringe benefits, low productivity and high turnover is the most common type of part time work (Tilly, 1990). Involuntary part-time employment accounts for almost all of the expansion in the part-time share of total U.S. employment since 1970. The effect on family income of part time workers is detrimental: "Families of part time workers end up with low incomes' contributing to the recent growth of income inequality in America" (Tilly, pp.7) However, the effect on family incomes of involuntary part time workers is even worse: " [In 1986]...involuntary part time workers had median family incomes $5000 below that of voluntary part time workers, while voluntary part time workers had median family incomes about
$5000 less than full time workers." (Tilly, pp.10) According to Tilly's study, blacks are one of the groups hardest hit by the expansion of involuntary part time employment. While they are only two thirds as likely as whites to hold a voluntary part time job, they are 1.7 times more likely to work part time involuntarily. When compared with the rates for the workforce as a whole, blacks have the highest rates of involuntary part time employment (7.2%). Black women have the highest rate of involuntary part time employment, succeeded by black men (6.5%).

A fourth trend engendered by the restructuring process on the organizational level of the firm is the erosion of internal labor markets, which, as noted by Noyelle (1984,1987) are the organizational structures affirmative action programs were designed to regulate. The erosion of internal labor markets involves the breakdown of job ladders, contraction of middle level management positions and subsequently, a decrease in opportunities for upward mobility through job ladders. Affirmative action and EEO legislation were designed to expand access to internal labor markets for black workers who were historically segmented into departments characterized by low pay, low mobility and high turnover. However, Noyelle theorizes that affirmative action, along with technological, competitive and educational influences, lead to the dismantling of internal labor markets. This, in turn, has made current affirmative action programs and procedures harder
to enforce, to the detriment of black workers, who had heretofore benefitted from these measures. (Jonathan Leonard, 1984)

A fifth trend affecting black employment prospects is decreasing government spending on social programs (such public service employment) and the contraction of jobs associated with the administration of these services. This trend has had a negative impact on black incomes because government jobs have been a source of steady employment and upward mobility for large numbers of blacks. The public sector accounted for much of the improvement in black employment during the 1970s. (Jeffries and McGahey, 1989) In the 1980s, 35% of black males and 45% of black females owed their jobs directly or directly to government spending. 54% of black male college graduates and fully 72% of black female graduates had jobs attributed to federal spending (Rumberger, 1983). The contraction of government spending resulted in widespread job loss for blacks:

"Although black employment gains were substantial in the public sector, the current shrinkage of government is causing rapid reversals of those gains. Federal agencies dismissed minorities at a rate 50% greater than that for whites in 1981; the number of layoffs doubled in 1982, hitting upper level black professionals the hardest." (From the New York Times, Sep. 17, 1983 in Jeffries and McGahey, 1983)

Another result of the contraction of government spending initiated during the Reagan era was decreasing enforcement of affirmative action and anti-discrimination programs. In
addition, several Supreme Court decisions during the 80s undermined the legal framework supporting anti-employment discrimination measures. These decisions place the burden of proving employer intent to discriminate on the plaintiff, rule out the use of statistical evidence to prove discriminatory employment policies, and permit the reversal of prior decisions regarding the affirmative action hiring of blacks. They also reinterpret civil rights legislation as protecting against discrimination at the hiring stage, but not covering discrimination any time thereafter\(^1\). These changes in anti-discrimination law, coupled with increasingly lax affirmative action enforcement and changing firm structures (i.e. erosion of internal labor markets) may be making the fight against employment discrimination increasingly difficult.

In addition to the aforementioned trends, Shulman (1987) argues that a transformation in the nature of discrimination practiced by employers helps explain the persistent black white unemployment differentials, despite narrowing of wage and occupational gaps. After examining EEOC data on discrimination complaints and finding a steady upward trend in the ratio of both black male and female employment complaints, Shulman concludes that employers are shifting away from wage discrimination towards discrimination at the hiring stage.

\(^1\) This information is from articles which appeared in the New York Times on June 5, 13, 16, and December 30 of 1989 and October 15, 18 of 1990.
According to Shulman, restrictions on compensatory wage discrimination caused the shift toward discrimination at the hiring stage, because it is harder to detect.

According to Johnson, 1987, increasing employment discrimination is only one of several strategies use by employers to make discrimination less obvious:

"...discrimination practices have become less obvious, and consequently, less subject to legal action. At a recent EEOC satellite seminar...speakers talked of companies sorting resumes by zip code to 'weed out people from the wrong side of the tracks,' and the pervasive practice of placing blacks in 'dead end' positions or functional areas into which firms have promoted blacks and other minorities for years." (pp.20)

Harrison and Gorham (1989) speculate that all of these trends (de-industrialization of urban areas, shift way from blue collar manufacturing, expansion of the service sector, the proliferation of involuntary part time employment, breakdown of internal labor markets, contraction of government spending and employment, and the breakdown of affirmative action) have helped fuel the polarization in family incomes, especially among blacks. According to their analysis of family incomes and black wages, over the last decade, black families have been experiencing a polarization in family incomes. Although this income polarization appears in the data on white families as well, this process has had a particularly negative result for blacks. While growth at the top of the white earnings distribution exceeded growth at the bottom, there has been no growth at the upper tail of the black earnings distribution, despite growth at the bottom. This could well be
a reflection of another trend reported by Harrison and Gorham: the decreasing incidence of well paid female and black workers during the 1980s. According to their analysis, blacks did not gain access to high paying jobs during this period. As a result, Harrison and Gorham conclude that

"...practically all high black family incomes must be the result of the packaging of different forms of income or from the wages of more than one family member...Black families simply cannot rely on the wages of one family member to propel them into the middle class...black families, far more than white families, need two or more earners to attain a middle class standard of living" (Harrison and Gorham, 1989)

These findings are consistent with the results of Reimers' study, which showed that black families relied less on the earnings of a single breadwinner (the male head) and relied more on the earnings of females and other family members, compared to white families. Harrison and Gorham attribute the overall polarization in black family incomes to several trends affecting the earnings of black workers: (decrease in returns to schooling for black college graduates, increases in involuntary part time employment, the breakdown of affirmative action, contraction of public sector employment, shift away from blue collar manufacturing, growing anti-unionism in the private sector).

These transformations provide the backdrop against which one must examine trends in labor force activity of black men and women over the last decade.
2.3 RECENT TRENDS IN THE LABOR FORCE ACTIVITY OF BLACK WOMEN

As Almquist and Einhorn (1977) note in their article on women, work and the labor force, black women have had higher labor force participation rates since the 1900s. However, the rate of increase for black women has not been as sharp as it has for white women. Consequently, by 1972, only a slightly higher proportion of black women than white women were in the labor force. By 1980, black women's labor force participation rate exceeded white women's by a very small percentage— it was approximately 1.08 times larger than that of white women. (Smith and Tienda, 1988)

As Barbara Jones (1982) notes in her article on the labor force participation rate of black women,

"Traditionally, black female earnings have made significant contributions to the income of black families as well as for households with female heads. Recently however, growth in the labor force participation rate of black women has not kept pace with that of the total female population. Thus, the relative economic advantages of more earners in all black families is dissipating, and a more serious problem of no earners exists in many of the rapidly growing number of black families with female heads". (Jones, pp.11)

What is interesting is that black women's labor force participation rate has not increased as fast as that of white women, in spite of the fact that black females have all the characteristics which economist find most encouraging to labor force participation. First of all, there are more black families headed by women. Second, there has been a faster
growth in earnings among employed black females. Third, black females have made faster relative improvements in educational attainment. Fourth, black males have lower earnings than white males. Fifth, there has been a faster drop in the number of children in black families. Sixth, when surveyed, black women display a more positive attitude towards work than white women do. All these factors indicate that the growth in black women's labor force participation rate should be comparable to that of white women's. However, another variable, besides those listed above, influences female labor force participation rates -- the demand for women's labor supply. According to Jones, "...the demand for the labor of black women has not increased as rapidly as that the demand for white women workers. This argument would explain the uneven growth in black female work rates... the increasing rate among better educated women and the declining rate among the less well trained." (Jones, pp.15)

There are some contradictory trends in the labor force activity of black women. First of all, single divorced and separated white women have higher work rates than married white women, probably due to their lower family income. However, this is not the case for black women. In 1983 the work rates for never married women were lower than those for married women living with husbands. For white women however, the work rates for single women were higher than those of married women.
Between 1972 and 1983 the labor force participation rate for younger black women, age 16-24 and to a lesser extent for women age 25-34 dropped well behind those of their white counterparts. Hence, Jones argues that the relative decline in labor force participation rates among black women as a whole can be pinpointed to the experiences of these age cohorts.

Black females also have disproportionately higher unemployment rates than white women. In 1983, black female unemployment rates were twice as high as those for white women, with black women in the 16-19 age group exhibiting the highest rates of unemployment. High unemployment rates and low labor force participation rates among young black women, also, argues Jones, explains the low work rates of this group.

Jones also finds that a larger percentage of black women are excluded from the labor force due to inadequate education. Frank Mott (1978) discovered a similar trend in his study of female labor force participation rates. He found that black women who were leaving the labor force were of lower socio-economic status and less successful in terms of wages. Those who remained worked longer hours, and thereby experienced greater increases in real incomes relative to white women. In addition, Jones found that poorly educated white women fair better than poorly educated black women occupationally. Black women suffer a more severe penalty for being less educated. They hold the lowest paying jobs and have the hardest time escaping from traditional female positions.
In sum, Jones concludes that "...the sluggish growth in black female labor force participation rates appears to be a response to inadequate employment opportunities with reasonable wages." (pp. 27) Although black women have a more tenacious commitment to the labor force, they meet with limited receptivity in the labor market. Jones argues that the shift from manufacturing to services and the movement of employment from the central cities in the Northern and Central areas to the suburbs, the west and offshore, have removed the primary labor market opportunities for black workers, both male and female.

2.4 RECENT TRENDS IN THE LABOR FORCE ACTIVITY OF BLACK MALES

Historically, the employment and labor force participation rate of black males has been much lower than that of whites. While in the 1970s, some theorists claimed that individual earnings for black and white males of similar age and skill cohorts were converging, black males' unemployment rates (with the exception of youth) still hovered around two times that of white males, while their labor force participation rates continued to decrease.

In addition to chronically high relative unemployment and labor force participation rates for black males, recent studies show a steady erosion in the black white male earnings differential, especially during the 1980s. They also indicate that black males relative economic standing has not improved much since 1975:
"Census data show that in the postwar period the median income of black males has risen from a level averaging about 55 percent that of whites in the late 1940s to 63 percent in the early 1980s... This optimistic conclusion is not inescapable however. [The data] also reveal that most of the improvement occurred during the late 1960s and that no improvement has occurred since 1975." (Magnum and Phillips, 1988).

In their study examining the relative economic position of young black men, Bound and Freeman (1990) find a clear pattern of change which contradicts the 'vintage effect' hypothesis:²

"The CPS data show that the era of relative black economic advance ended in the mid 1970s. Earnings differentials between recent black and white labor market entrants widened from 1976 to 1988, particularly among groups where the differentials had essentially disappeared by the mid 1970s -- college graduates and workers in the midwest." (pp.1)

Harrison and Gorham's analysis of CPS data for 1980 and 1988 also show widening gaps in black/white male income differentials and returns to education.³ Since 1979, black men age 25-34 experienced a 161% increase in the numbers working below the poverty line. (pp.13)

In recent his analysis of black economic indicators, Cotton points out that black-white male income ratios for all ages had decreased significantly from a high point of just over .60 in 1979 to about .56 in 1987.

² The vintage effect hypothesis holds that a long term steady improvement in the education of successive birth cohorts of black males is causing a steady convergence in black and white male incomes.

³ For blacks completing four years of college, in 1987, 42% worked below the poverty line compared to 26% for whites. In addition, the number of black college grads with high paying jobs fell by 27% compared to a 2.7 decrease for whites of this same cohort.
Cotton argues that "... the general deterioration in black male relative income is no doubt associated with the very considerable changes in their occupational distribution that occurred during the 1970s and particularly during the 1980s." Although both black and white males experienced major shifts out of blue collar and service occupations, "...the black changes were much more extensive." Blacks were moving out of blue collar occupations which were characterized by high black-white earnings ratios and entered white collar slots characterized by low earnings ratios. On the other hand, for whites, the shift from blue to white collar occupations often "appeared to be a step up the occupational earnings ladder, while the black move was a step down." (pp.808) Over half of a 15 year increase in black male blue collar and increase in white collar employment occurred between 1980 and 1985, "...coterminous with accelerated increase in low wage jobs observed over the 1979-1984 period by Bluestone and Harrison." (pp.808)

Bound and Freeman (1990) cite different factors for different strata of black males. For recent labor market entrants in the midwest, the main factors are changes in industry and occupation (decline in blue collar manufacturing jobs) decline in unionism and the growth of relative supply. For college graduates, the determinants of the widening earnings gap are changed occupational composition, shifts in industry demand, and growth of relative supply, with weakened
affirmative action a likely cause of the occupational downgrading. For high school dropouts, an increase in crime appears to be major causal factor for reduced employment. I would prefer to interpret this result differently - poor employment opportunities induce youth pursue economic gains in the illegal sector, which in turn reinforces their improbability of finding legal employment.

In his study of black youth unemployment, Michael Stoll (1990) found that black youths employment options are largely limited to secondary labor markets. Furthermore, Stoll found that black youths are much more sensitive to fluctuations in the labor market--when labor markets are tight, they have disproportionately high levels of unemployment, relative to whites. Given these findings, it is more probable that there is a dialectical rather than unidirectional relationship, as Bound and Freeman's conclusions suggest, between black youth unemployment and crime. There is also no mention of the relationship between the increasing influx of semi-automatic weapons and low cost, highly addictive substances to urban areas over the last 10 years, and increasing unemployment, labor market fluctuations and crime levels.

Another reason for the decline in black-white ratios is the decline in the real value of minimum wage which occurred between 1980 and 1989. Bound and Freeman (1990b) estimate that this decline widened the black white male earnings differential by about 1.5 percentage points more than it would
have been had it been raised with rates of inflation instead of decreased. According to Bound and Freeman, this minimum wage decline can account for approximately 17% of the trend decline in black white earnings over the period studied.

2.5 CONCLUSION

To conclude, there are several ways to view the widening white-black family income gap. One approach ascribes the widening divide to the deterioration of the black family as a social institution. Some proponents of this view argue that family income is a terrible indicator of black progress, precisely because of these changes in black family structure. Others also ascribe the widening gap to the increasing number of black families head by women, but point to the economic plight of black males as the primary causal factor. A third approach, which I have adopted for this study, does not eschew the effects of changing family structures on the black white family income gap, nor does it restrict its focus to this one issue. Instead, this approach evaluates the effect that trends in the labor market activity of both black men and women, as well as changes in family structure and access to non-labor income have on the family income gap.

As shown in the literature review, trends on several fronts affect the income-generating ability of black families, many of which have been engendered in the economic restructuring process which has swept the country since the 1970s. Most of the transformations have had negative effects on the labor
force activity of black men and women, and have in turn lead to an increasing polarization of family incomes both between blacks and whites and among blacks themselves. As we have seen in the review, declines in demand for black women's labor, especially less educated black women, has slowed the growth of black women's labor force participation rates. Shifts in industry demand, occupational changes, and growth in relative supply have been eroding the black-white male earnings ratio. Both black males and females have been affected by the breakdown of affirmative action.

2.6 IMPLICATIONS

In this study, I found that the black-white family income gap increased between 1979 and 1987, and one of the major reasons behind the increasing gap to be falling wage rates, especially for black males. Although I found black wives compensating for the lower earnings of black men, I also found their compensatory ability compromised by sluggish labor force participation growth rates, between 1979 and 1987. I also found that white families have more access to non-transfers.

The results of this study support the argument that it is unwise to restrict analyses to individual earnings data to assess the economic health of Black Americans. It also suggests that it is unwise to attribute all of the decline in black white family income to changing structure of black families as determined solely by a decline in the pool of marriageable
black males. Instead, the findings of this study suggest that it's better to take a multifaceted approach to the problem of the black-white family income gap, incorporating an understanding of the effects of economic restructuring on the factors which determine family income.
CHAPTER 3:
DATA SOURCE, DATA SELECTION AND
DECOMPOSITION METHOD
3.0 This chapter outlines the data and method used in this study. It begins with a brief summary of the methodology, then proceeds with a description of the data used and a more detailed description of the decomposition techniques used in the study.

3.1 SUMMARY OF METHODOLOGY

Total family income depends on the earnings of each family member as well as the amount of non-labor income (i.e., property and transfer payments). Therefore, intergroup differences in family income result from differences in family structure, different levels of labor market activity by various family members, and differences in wage rates and non-labor income. In this study, I will use data from the 1980 and 1988 Current Population Surveys to locate and analyze the sources of the black-white family income gap. First I will compare black and white mean family income from the following sources:

1) married couple families- earnings of male heads, earnings of female heads, earnings of male spouses and earnings of female spouses;
2) single parent families- earnings of male heads and earnings of female heads;
3) other family members;
4) non-labor income;

Then, I will examine how differences in average family composition, average labor force participation rates,
employment rates, weekly hours worked and hourly earnings of family heads contribute to the overall gap.

Finally, to assess how factors contributing to the black-white family income gap have changed over the last decade, I will analyze 1979 and 1988 CPS data, and compare the results.

3.2 DATA SOURCE

The Current Population Survey is a monthly survey conducted by the Census Bureau designed to collect data on the labor force status, earnings and demographic characteristics of the civilian non-institutional population of the United States. Each survey interviews approximately 56,000 households containing approximately 118,000 individuals, scientifically selected to represent the national population distribution. I am using information from the March 1980 and March 1988 Current Population Surveys. Since data for this study could not be satisfactorily obtained from published tables, I extracted the information from CPS tapes. Most of the information collected in the survey is for the prior year. However, there are some variables, like usual hours worked per week, which are for the current year. Therefore, most of the information contained in the 1980 CPS and the 1988 CPS are from 1979 and 1987, respectively.

Data on the CPS tapes is organized hierarchically by household, family and individual records, allowing the use of
each as a unit of analysis. This organizational structure did present certain limitations, the ramifications of which will be discussed in the following sections.

3.3 DATA SELECTION

Because of the way the CPS data is organized, it is possible to dump household and family records downwards onto person records, i.e., create a data set where the individual is the unit of analysis but which also contains information about the individuals family and household relationships. However, it requires massive amounts of computer space to do the reverse, that is, dump person records upwards into family and household records in order to gain access to the labor force and earnings data of individuals in each household or family, by family unit. The ideal data set for this study would be organized in this manner, with individual earnings data nested in family records, so that the labor force characteristics of family members could be analyzed by family units, instead of the other way around. However, due to resource constraints, I downloaded family records onto individual (person) records and extracted cases by person, instead of by family. This posed several problems, especially for calculating the number of families represented in the data set, and obtaining other family members mean earnings contribution to total family income. I solved the first problem by assuming that the total number of families equals total number of family heads. I used
the same method for estimating the distribution of family types (male headed married couple families, female headed married couple families, male headed single parent families and female headed single parent families). I will explain how I estimated other family members' mean earnings contribution to total family income in section 3.5 which describes the decomposition techniques used in the study.

I have limited my analysis to persons who fit the following criteria: age 13 or above, are white, or black, and of non-Hispanic origin, and belong to a primary family. I've restricted my analysis to primary families (that is, families to which the household head belongs) so that I could more accurately assess the number of families represented in the data set. However, this means that both related and unrelated subfamilies have been excluded from the analysis. The decision to analyze only primary family data may result in an underestimate of the extent to which family members outside the primary family or unrelated individuals contribute to total family income. This may present a special problem for black families, whom Harrison and Gorham (1989) argue, rely more heavily on income packaging than whites to propel them into the middle income category. More importantly, restricting my analysis to primary families prevents examination of "non-traditional" families, that is, families, or resource pooling units, which do not conform to traditional nuclear and single parent family models. The advantage of narrowing my focus to
primary families is that allows me to hold the unit of analysis constant.

Also, the fact that the CPS undercounts low income minority populations in general means that the official figures may further understate the true gaps between black and white families. However, factors (restricting my sample to primary families and undercounting) contribute to an underestimation of the black-white family income gap.

3.4 VARIABLE DEFINITIONS

FAMILY: The CPS definition of family is a group of two persons or more (one of whom is the householder) residing together and related by birth, marriage or adoption. All such persons, including related subfamily members, are considered as members of one family. This study examines only primary families, therefore, the earnings of related subfamily members will not be considered. Families are divided into two types: 1) married couple families, 2) single parent families;

FAMILY HEAD:
household head;

SPOUSE:
person married to family head (householder);

OTHER FAMILY MEMBER:
is neither the spouse or head but is in primary family;

RACE:
Non-hispanic black, non-hispanic white;

TOTAL FAMILY INCOME: money wages or salary; net income from non-farm employment; net income from farm self-employment; social security or railroad retirement; supplemental security income; public assistance or welfare payments; interest (on savings or bonds); payment or unemployment and workmen's compensation; private pensions or government employee pensions; alimony or child support, regular contributions from persons not living in the household and other periodic income;
EARNINGS:
  wages and salaries; non-farm self-employment income; farm income;

TRANSFER INCOME:
  social security and or railroad retirement; supplemental security income; public assistance; veterans, unemployment, workmen's compensation;

NON-TRANSFER INCOME:
  interest; dividends, rentals, trust income amounts; pensions; alimony, child support; other income;

WEEKS IN LABOR FORCE:
  weeks worked last year plus weeks looking;

WORK RATIO:
  where number of weeks worked exceeds 0, weeks worked divided by weeks in the labor force;

HOURS WORKED PER WEEK:
  Number of hours worked per week last year;

EARNINGS PER HOUR:
  Annual earnings divided by the product of number of weeks worked and number of hours worked per week;

UNEMPLOYMENT RATE:
  Number of people in labor force who are unemployed but looking for a job divided by number of people in the labor force;

LABOR FORCE PARTICIPATION RATE:
  Number people in the labor force divided by total number of working age people;

3.5  DECOMPOSITION TECHNIQUE

The combined earnings of several family members comprises the bulk of family income. Therefore, differences in family income between ethnic and racial groups results from the combined effects of differences not only in individual earnings, but also unemployment levels, labor force participation, other labor force characteristics and family
structure. In order to analyze how these differences affect relative family incomes, I will adapt a method developed by Cordelia Reimers (1984) which incorporates a two pronged approach: a comparative analysis of black and white mean family income by source, and comparative analysis of the labor force characteristics of black and white family heads.

COMPARING RELATIVE INCOME BY SOURCE

It should be obvious that total family income is just the sum of its parts. This assumption can be expressed in the following equation:

\[ \bar{Y}_i = \sum E_{ij} + NL_i \]

where:  
\( i \) = racial group  
\( j \) = family role  
\( Y \) = mean family income for race \( i \)  
\( E \) = mean earnings of family members in role \( j \) in race \( i \)  
\( NL \) = mean family income from transfer and non-transfer payments for race \( i \).

In order to compare relative income by source, I first calculate the mean contribution of each source to total mean family income. I do this using the following equation:

\[ \bar{E}_{ij} = (n_i/n_{ij})(n_{ij}/n_{ij}^e)(E_{ij} \neq 0) \]

where:  
\( n_{ij} \) = number of families in race \( i \) with member in role \( j \)  
\( n_i \) = number of families in race \( i \)  
\( n_{ij}^e \) = number of families in race \( i \) with earners in role \( j \) who have earnings.

Simply interpreted, the mean earnings coming from earners in a particular family role (i.e. family head) can be derived by finding the proportion of families in race \( i \) with earners in
role \( j (n_i/n_{ij}) \) and multiplying it by the proportion of families with earners in role \( j \) with earnings over zero \( (n'_{ij}/n_{ij}) \). We then multiply this ratio by mean earnings of persons in role \( j \) with earnings over zero \( (E_{ij} \text{ with earnings over 0}) \) to get those persons mean contribution to mean family their racial group\(^4\).

In order to estimate the mean contribution of non-labor income to total family income for each group, I use a slightly different method. As explained before, data limitations forced me to use family heads as a proxy for the number of families represented in the data set. Therefore, I estimate the number of families with earnings from this source by obtaining the number of family heads in families whose income from these sources exceeds zero. I then calculate the mean contribution of non-labor income (transfer and non-transfer income) to mean total family income by multiplying the mean non-labor income for person's with income for this source over zero, by the proportion of families with non-labor income over zero.

Estimating the mean contribution of other family members to total family income also presented unique problems. Data limitations prevented extraction of personal income and labor force data by family unit (i.e. so that the number of other family members with earnings over zero can be calculated

\(^4\) This equation represents an approximation, not an identity. By using it, I will be ignoring some terms such as the covariance and error terms. For a more in depth explanation how this equation was derived, see Appendix 1.
directly). Therefore, I calculate the contribution of other family members to family income as the residual, i.e., the difference between mean total family income and the sum of mean income from each source except for other family members. This procedure is theoretically consistent with the assumption that total mean family income is equal to the sum of its parts, or \( \bar{Y}_i = \sum \bar{E}_{ij} + \bar{NL}_i \). After computing the mean of each component of family income, I then calculate the ratio black to white family income (both for total family income and by source).

**DECOMPOSING RELATIVE EARNINGS BY SOURCE**

To understand differences in income by source, I decompose the relative earnings of family heads, spouses and other family members. Since a person's earnings, by definition are:

\[
E_{ij} = (wlf)(ww/wlf)(h/w)(e/h)
\]

where:
- \( wlf \) = weeks in the labor force
- \( ww \) = weeks worked
- \( h \) = hours
- \( w \) = weeks
- \( e \) = earnings

we can approximate the ratio of mean earnings of, for example, black and white male heads in married couple families, as a product of the following factors: the ratio of the percentage of families with male heads present, the ratio of the percent of those present who were in the labor force, the ratio of their average weeks in the labor force, the ratio of their average employment rates (weeks worked/weeks in the labor
force), the ratio of average hours worked per week and the ratio of mean hourly earnings. Insofar as any of these factors falls below unity, that factor contributes to a shortfall (relative to whites) in the mean earnings of black male heads.

3.6 POPULATION CHARACTERISTICS

The samples for both 1979 and 1987 are restricted to persons 13 or older, who belong to a primary family and are either non-hispanic black or non-hispanic white. The 1979 sample contains 88,075 persons (78,452 are white, and 9,623 are black) and approximately 35,224 families5. The demographic breakdown for family types is as follows:

<table>
<thead>
<tr>
<th></th>
<th>1979 Whites</th>
<th>1979 Blacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Families</td>
<td>31,453</td>
<td>3,771</td>
</tr>
<tr>
<td>Married Couple</td>
<td>27,210</td>
<td>2,106</td>
</tr>
<tr>
<td>Single Mother</td>
<td>3,426</td>
<td>1,150</td>
</tr>
<tr>
<td>Single Father</td>
<td>817</td>
<td>155</td>
</tr>
</tbody>
</table>

The 1987 sample contains 86,850 persons, (77,972 are white and 8,878 are black) and approximately 36,671 families. The demographic breakdown for family types is as follows:

<table>
<thead>
<tr>
<th></th>
<th>1987 Whites</th>
<th>1987 Blacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Families</td>
<td>32,907</td>
<td>3,864</td>
</tr>
<tr>
<td>Married Couple</td>
<td>27,773</td>
<td>1,978</td>
</tr>
<tr>
<td>Single Mother</td>
<td>3,958</td>
<td>1,655</td>
</tr>
<tr>
<td>Single Father</td>
<td>1,176</td>
<td>231</td>
</tr>
</tbody>
</table>

5 I say approximate because I estimate the number and distribution of families using family heads as a proxy.

54
3.7 CONCLUSION

Based on the decomposition method explained above, I estimated the following items, for 1979 and 1987:
1) the proportion of family income represented by each source
2) the mean earnings or income contribution from each source
3) the factors determining earnings contribution of each family member.

The explicit calculations are included in Table Two and Appendix 2. Then I used these estimates to construct earnings ratios for black and white families for 1979 and 1987. These tables serve as the basis for the comparative analysis of black and white family income. The findings of my study are presented in the next chapter.
CHAPTER 4: DATA ANALYSIS
4.0 In this chapter I analyze the results of the decomposition. First, I compare the relative proportions that each source represents of family income. Then, I compare the mean value of each sources’s earnings contribution to determine where the income gaps arise. Finally, I compare the factors determining earnings for each source to uncover the major contributors to earnings inequality.

4.1 COMPARISON OF MEAN FAMILY INCOME BY SOURCE

In 1987, the income of the average black family\(^6\) was only 65% as high as that for white families. This represents a decline from 1979 levels, when they had 67% as much as white families. Since total family income depends on the earnings of several family members plus non-labor income, examining the average amount of coming from each source will reveal where the total family income gaps arise. This analysis entails both comparing the proportion total family income coming from each source as well as the mean earnings contribution of each source. There are two phrases I will be using frequently throughout this section of the study: 1) mean earnings contribution and 2) mean earnings contribution as a proportion of total mean family income. The first refers to the average dollar amount contributed by each source to total family income. The second phrase refers to the proportion of total family income represented by the mean earnings contribution of each source.

\(^6\) Primary family.
## Table One

Decomposing the Black-White Mean Family Income Ratio: Comparing Mean Earnings and Income Contribution by Source
1987

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total family income:</td>
<td>$40,831</td>
<td>$26,512</td>
<td>0.649</td>
<td>0.670</td>
<td>-3.13%</td>
</tr>
<tr>
<td>Marital Couple Families:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male heads</td>
<td>$18,652</td>
<td>$7,269</td>
<td>0.390</td>
<td>0.429</td>
<td>-9.09%</td>
</tr>
<tr>
<td>Female heads</td>
<td>$511</td>
<td>$686</td>
<td>1.343</td>
<td>1.178</td>
<td>14.01%</td>
</tr>
<tr>
<td>Male spouses</td>
<td>$1,016</td>
<td>$1,021</td>
<td>1.005</td>
<td>0.916</td>
<td>9.72%</td>
</tr>
<tr>
<td>Female spouses</td>
<td>$6,236</td>
<td>$4,159</td>
<td>0.667</td>
<td>0.769</td>
<td>-13.26%</td>
</tr>
<tr>
<td>Single headed families:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female heads</td>
<td>$1,245</td>
<td>$3,163</td>
<td>2.540</td>
<td>2.673</td>
<td>-4.98%</td>
</tr>
<tr>
<td>Male heads</td>
<td>$660</td>
<td>$718</td>
<td>1.087</td>
<td>1.079</td>
<td>0.74%</td>
</tr>
<tr>
<td>Other family members:</td>
<td>$4,739</td>
<td>$4,539</td>
<td>0.958</td>
<td>0.856</td>
<td>11.92%</td>
</tr>
<tr>
<td>Non-labor income:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfers</td>
<td>$1,734</td>
<td>$1,875</td>
<td>1.081</td>
<td>1.253</td>
<td>-13.73%</td>
</tr>
<tr>
<td>Non-transfers</td>
<td>$6,083</td>
<td>$3,083</td>
<td>0.511</td>
<td>0.691</td>
<td>-26.05%</td>
</tr>
</tbody>
</table>

My computations.
The first set of ratios we will examine will be those representing the proportion of total income constituted by each source. This measure allows us to determine and compare which income sources black and white families rely on most. (See Table One). If we examine the mean earnings contribution of husbands as a proportion of family income, we see that black families receive 65% as much income from this source as do white families. In other words, black families receive only 31% of their income from this source, while white receive 48%. This represents a slight decrease from 1979 levels, when black families were receiving 66% as much income from this source as were white families (a decrease in the ratio of about 1.3%).

When examining the proportion of family income represented by wives earnings, we see that in 1987, black families receive about 1.1 times more income from wives as white families do. This represents a modest decline (about 5.5%) from the 1979 black white contribution ratio, when black families received about 1.2 times more income from wives than did white families.

If we shift our attention to single parent families, we observe that in 1987, black families receive 3.9 times more income from single female family heads than do whites. In other words, while 12% of black family income comes from single mothers, only 3% of total white family income comes from this source. This proportion is slightly down from 1979
levels (about 1.9%), when black families received exactly four times as much from this source than did white families. Here we can see that while the proportion of family income coming from single female heads rose between 1979 and 1987, it rose faster for whites than it did for blacks, hence the decrease in the ratio.

On the other hand, black families receive 1.7 times as much of their income from single male family heads (single fathers) than white families do. That is, the earnings of single black fathers represents 2.7% of total family income while the earnings of their white counterparts represents 1.6% of total family income. This represents an increase from 1979 levels (about 4% increase in the black-white contribution ratio), when the earnings of black single fathers represented 1.6 times more than the earnings of white single fathers as a proportion of total family income. Therefore, the proportion of black family income coming from this source increased relative to whites.

When looking at income from other family members, we see that in 1987, black families received 17% of their income from other family members whereas white families received only 12% percent of their income from other family members. In other words, the proportion of black family income from other family members is 1.5 times higher than the proportion of white family income coming from this source. This represents an large increase from 1979 levels, (about a 15.5 increase in the
black white contribution ratio) when black families received 1.3 times more income from this than did whites. Therefore, between 1979 and 1987 black families became increasingly reliant on the earnings of other family members, relative to white families. This is consistent with Harrison and Gorham’s (1990) income packaging argument which holds that black families rely more on the income of other family members than white families do.

The last major source of family income is non-labor income in the form of transfer payments and non-transfer payments. To demonstrate the different extent to which black and white families rely on each source, I have separated non-labor income into the following categories: transfer income which includes social security or railroad retirement, supplemental social security, public assistance, veterans comp, unemployment and workmen’s compensation and non-transfer income, which includes interest, dividends, rentals, trust incomes, pensions, alimony, child support and other income. In 1987, income from transfer payments as a proportion of black family income is 1.7 times greater than the proportion of white family income coming from this source. In other words, black families receive about 7.1% of their income from this source, while white families receive 4.2%. This represents a sizable decline from the 1979 ratio (about 10.9%), when black families were receiving about 1.9 times more income from transfer payments than white families. If we look at non-
transfer income (income from property, dividends, alimony, pension and other sources) we see that in 1987, on average, black families receive only 77% as much from this source as white families. This represents a large decline from the 1979 ratio (about 23.7%), when the proportion of black family income coming from this source was slightly larger than the proportion of white family income from this source. Therefore, black families are becoming less reliant on income from transfers and non-transfers.

To conclude, these calculations suggest that on average, in 1987, white families have more access to the earnings of husbands and non-transfer income than do black families. And as a result, black families must rely more on every other source, especially single female heads, single fathers, or in the case of married families, wives. Earnings and income from these sources represent larger proportions of family income than they do in white families, and in a sense, are over compensating for shortfalls in the other sources. Between 1979 and 1987, the relative proportion of family income from black husbands, single black mothers stayed somewhat constant, each ratio decreasing slightly by under two percent. However, black families experienced large relative decreases in income from non-transfers, transfers, and smaller decreases in the relative proportion of black family income coming from wives. On the other hand, black families experienced increases in the
relative proportion of family income from other family members (15.5%) and single fathers (4%).

Changes in the relative proportion each source represents as a component of family income are the result of changes in the percentage of families which have earnings and income from each particular source, and/or changes in the relative earnings or income coming from each source. For example, although proportion of black family income coming from wives is larger than it is for white families in both 1979 and 1987, this ratio decreases by 5.5% over the years, suggesting that the extent to which white families rely on wives earnings is catching up to that of blacks. This decrease could be due to any number of causes, such as increasing labor force participation of white wives. It could also reflect the increasing entrance of white wives into the labor market, which could in turn be stimulated by three interrelated trends: the increasing demand for white women’s labor, declining earnings of white husbands, and increasing number of white female headed families. The decrease in the ratio could also be due to a decreasing proportion of black wives relative to the number of white ones.

On the other hand, black families' increasing relative reliance on other family members may only reflect that black families have more children, on average, but that declining income from other sources such as males, is forcing families to increase their reliance on the earnings of other family
TABLE TWO
WHITE AND BLACK MEAN FAMILY INCOME BY SOURCE, EXPLICIT CALCULATIONS
1987

<table>
<thead>
<tr>
<th>Source</th>
<th>WHITES Mean $ Amount</th>
<th># of families w/E or Y from role j</th>
<th>family weight</th>
<th>weighted $ amount</th>
<th>% Contribution from 1979</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total family income</td>
<td>$40,831</td>
<td>32,907</td>
<td>1.000</td>
<td>$40,830</td>
<td>1.000</td>
</tr>
<tr>
<td>Married Couple Families</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male heads</td>
<td>$23,273</td>
<td>27,773</td>
<td>$29,122</td>
<td>22,224</td>
<td>0.675</td>
</tr>
<tr>
<td>Female spouses</td>
<td>$7,982</td>
<td>27,773</td>
<td>$13,002</td>
<td>17,073</td>
<td>0.519</td>
</tr>
<tr>
<td>Single headed families</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female heads</td>
<td>$10,352</td>
<td>3,958</td>
<td>$15,143</td>
<td>2,706</td>
<td>0.082</td>
</tr>
<tr>
<td>Male heads</td>
<td>$18,439</td>
<td>1,176</td>
<td>$24,192</td>
<td>988</td>
<td>0.027</td>
</tr>
<tr>
<td>Other family members</td>
<td>$4,281</td>
<td>32,907</td>
<td>$7,357</td>
<td>21,192</td>
<td>0.644</td>
</tr>
<tr>
<td>Non-labor income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfers</td>
<td>$1,066</td>
<td>32,907</td>
<td>$4,659</td>
<td>12,248</td>
<td>0.372</td>
</tr>
<tr>
<td>Non-transfers</td>
<td>$4,922</td>
<td>32,907</td>
<td>$6,684</td>
<td>28,945</td>
<td>0.680</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>BLACKS Mean $ Amount</th>
<th># of families w/E or Y from role j</th>
<th>family weight</th>
<th>weighted $ amount</th>
<th>% Contribution in Contribu from 1979-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total family income</td>
<td>$26,512</td>
<td>3,864</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married Couple Families</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male heads</td>
<td>$16,207</td>
<td>1,978</td>
<td>$20,389</td>
<td>1,571</td>
<td>0.407</td>
</tr>
<tr>
<td>Female spouses</td>
<td>$9,463</td>
<td>1,978</td>
<td>$13,876</td>
<td>1,349</td>
<td>0.349</td>
</tr>
<tr>
<td>Single headed families</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female heads</td>
<td>$7,384</td>
<td>1,655</td>
<td>$12,498</td>
<td>978</td>
<td>0.253</td>
</tr>
<tr>
<td>Male heads</td>
<td>$12,006</td>
<td>231</td>
<td>$16,509</td>
<td>168</td>
<td>0.043</td>
</tr>
<tr>
<td>Other family members</td>
<td>$2,881</td>
<td>3,864</td>
<td>$7,140</td>
<td>2,458</td>
<td>0.636</td>
</tr>
<tr>
<td>Non-labor income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfers</td>
<td>$1,051</td>
<td>3,864</td>
<td>$3,861</td>
<td>1,876</td>
<td>0.486</td>
</tr>
<tr>
<td>Non-transfers</td>
<td>$2,016</td>
<td>3,864</td>
<td>$4,069</td>
<td>2,928</td>
<td>0.758</td>
</tr>
</tbody>
</table>

My computations. E =earnings; Y =Income;
members. The higher relative increase in the proportion of black family income coming from single fathers could be due to the fact single fathers head a higher proportion of black families than white families.

Examining the percent change in the proportion that each source of family income represents for both black and white families may clarify some of the underlying trends causing these relative changes. (See Table Two).

If we look at black families, we see that the biggest changes occur in the contributions of single male parents, single female parents and wives, respectively. While the proportion of black family income coming from single fathers increases by about 34%, the proportion of family income coming from single mothers and increases by about 21%, while the proportion of income coming from wives increases by about 16%. The proportion of family income coming from other family members increases only 1.2%. The biggest decrease however, was in the proportion of black family income coming from transfer payments (12.4%) followed by a 10.9 percent decrease in the proportion of family income coming from husbands and a 5.5% decrease in the proportion of family income coming from non-transfers. Therefore, the fastest growing sources of black family income for blacks are single fathers, single mothers, and wives, while the most rapidly declining sources are transfer incomes, husbands and non-transfer incomes. Are these trends similar for whites?
If we look at the percentage change in the proportion of white family income from each source between 1979 and 1987, we see that the biggest changes occur for income from single fathers non-transfer income and single mothers respectively. The largest change occurs in the proportion of family income coming from single fathers— an increase of 28.7 percent. The next largest increase is in the proportion of family income coming from non-transfer payments -- an increase of about 24 percent. The third largest increase is in the proportion of white family income coming from single mothers-- an increase of 23.1%. The biggest decrease however, was in the proportion of income coming from other family members (12.4%) followed by a 9.7% decrease in the proportion of family income coming from husbands. The smallest increase was in the proportion of family income coming from transfers-- a 1.7% decrease.

In sum, while the sources of black family income experiencing the biggest increases were single parents and wives, (with the biggest decreases being transfers, husbands and non-transfers), the sources of white family income undergoing the biggest increases were single parents, non-transfers and wives (with the biggest decreases in proportion of family income coming from other family members earnings and husbands). Therefore, between 1979 and 1987, both black and white families experience some similar trends. They both experienced decreases in the proportion of family income coming from husbands, and they both experienced increases in
the proportion of income coming from wives, single fathers and single mothers. However, while black families access to transfers and non-transfers was decreasing, white families access to transfers stayed about the same, while their access non-transfer income was increasing. This would explain the growing gap in income from this source. While black families access to the income of other family members stayed about the same, increasing slightly, white families reliance on the income of other family members decreased. This partially explains black families increasingly higher relative proportion of income from this source. Reliance on single mothers increased faster for whites than it did for blacks while reliance on single fathers increased faster for blacks than it did for whites. Reliance on husbands decreased faster for blacks.

This analysis shows us which are fastest growing and most rapidly declining sources of family income for each race. However, it does not show us how equal, or unequal, the relative earnings contributions of each source are. For that, we must compare the mean earnings contribution for each source by calculating ratios of the mean earnings contribution from each source, instead of comparing the proportion of family income represented by each source, as was done above. (See Table Three).

If we examine the ratio of mean earnings contributions (in dollars) for 1987, we see that black husbands mean earnings
### TABLE THREE

**DECOMPOSING THE BLACK WHITE MEAN FAMILY INCOME RATIO:**
Comparing Mean Earnings Contribution As Proportions of Family Income, 1987

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total family income</td>
<td>1.000</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married Couple Families</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>0.313</td>
<td>0.482</td>
<td>0.649</td>
<td>0.658</td>
<td>-1.34%</td>
</tr>
<tr>
<td>Females</td>
<td>0.183</td>
<td>0.165</td>
<td>1.106</td>
<td>1.170</td>
<td>-5.51%</td>
</tr>
<tr>
<td>Single headed families</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female heads</td>
<td>0.119</td>
<td>0.030</td>
<td>3.912</td>
<td>3.908</td>
<td>-1.90%</td>
</tr>
<tr>
<td>Male heads</td>
<td>0.027</td>
<td>0.016</td>
<td>1.674</td>
<td>1.609</td>
<td>4.04%</td>
</tr>
<tr>
<td>Other family members</td>
<td>0.171</td>
<td>0.116</td>
<td>1.475</td>
<td>1.277</td>
<td>15.55%</td>
</tr>
<tr>
<td>Non-labor income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfers</td>
<td>0.071</td>
<td>0.042</td>
<td>1.665</td>
<td>1.869</td>
<td>-10.94%</td>
</tr>
<tr>
<td>Non-transfers</td>
<td>0.116</td>
<td>0.148</td>
<td>0.786</td>
<td>1.030</td>
<td>-23.67%</td>
</tr>
</tbody>
</table>

My computations.
contribution is only 42% as high as their white counterparts, while black wives' mean earnings contribution is only 72% large as their white counterparts. However, black single mother's mean earnings contribution is 2.5 times larger than that of white single mothers, while black single father's mean earnings contribution is about 1.1 times higher than their white counterparts contribution. The mean earnings contribution of black other family members is almost as high as that of whites (96%) while the mean earnings contribution from transfer payments is 1.1 times larger than that of whites. Black families' mean non-transfer income contribution is about half as large as that received by the average white family.

The next step is to compare the black white ratios of mean earnings contributions to the ratios of mean earnings contributions as proportions of family income. This comparison yields some interesting yet seemingly contradictory results, which shed some insight on the nature of earnings differences between the two groups which contribute to the overall family income gap.

A useful device for assessing the inequality between each source of family income is to compare the ratios of mean earnings contributions as proportions of family income to the ratios the mean earnings contribution for each source. If all the factors determining income from each source were equal, except for those related to differences in family structure
(i.e. number of families with husband present) the ratio of earnings coming from each source would roughly correspond to the proportion of family income represented by that source. For example, when we examine these two ratios for black husbands, we see that the mean earnings contribution of black husbands is only 42% percent that of whites. However, their mean earnings contribution as a proportion of family income is 65% as large as whites. So not only is the proportion of income represented by the earnings of black husbands smaller than that of whites, but the mean earnings contribution, in dollars, is less than half the amount of white husbands. While part of this is due to the fact that fewer black families have husbands, the rest must be due to earnings inequality between black and white husbands.

While the proportion of black family income coming from wives is 1.1 times larger than that coming from white wives, their mean earnings contribution, in dollars, to overall family income is only 72% percent as high as white wives. Again, here we would expect that wives mean earnings contribution to total family income (not mean income of all black wives) would be a little higher than that of for white wives, since as a proportion of total family income it is 1.1 times larger than that coming from white wives. Similarly, while the proportion of family income represented by the mean earnings of single black mothers is 3.9 times higher than that of their white counterparts, their mean earnings contribution
is only 2.5 times higher than that of white single mothers. This means that black single mothers do not earn as much as white single mothers, even though their earnings constitute a much larger proportion of total mean family income. And while the proportion of black family income coming from other family members is 1.5 times greater than the proportion of white family income coming from this source, the mean earnings contribution of other family members, in dollar value, is only 96% as large as the mean contribution of their white counterparts.

These comparisons indicate that not only are there some serious shortfalls in the proportion of black family income coming from sources like the earnings of husbands and non-transfer income, but some serious gaps in earnings capacity for every source. In other words, although some sources of black family income (such as wives, single parents and other family members) are overcompensating for shortfalls in other sources (such as husbands and non-transfer income), the sources which are compensating for the others are compromised (or constrained) by relative shortfalls in the factors which determine earnings capacity. By far, the most serious gap is between black and white husbands. The source of these differences in family income composition (proportion coming from each source) and mean earnings from each source (the mean value coming from each source) can be uncovered by decomposing...
the earnings of each source into the factors that determine them.

4.2 DECOMPOSING THE MEAN EARNINGS CONTRIBUTION OF EACH SOURCE

Mean earnings over all families for a given type of family member are equal to the mean earnings of those in that family role who have earnings times the proportion of families that have such a member with non-zero earnings (Reimers, 1984). A person's earnings by definition are:

\[ E_{ij} = (wlf)(Ww/wlf)(h/W)(e/h) \]

where:  
- \( wlf \) = weeks in the labor force  
- \( Ww \) = weeks worked  
- \( h \) = hours  
- \( W \) = weeks  
- \( e \) = earnings

We can therefore approximate the ratio of mean earnings of blacks in role \( j \) as the product of the following factors: the ratio of the percentage of families with persons in role \( j \) present, the ratio of the percentage of those present who were in the labor force, the ratio of their average weeks in the labor force, the ratio of average employment rates (weeks worked/weeks in the labor force) the ratio of average hours worked per week and the ratio of mean hourly earnings. In so far as any of these ratios falls below unity, that factor contributes to a shortfall in mean earnings of black persons in role \( j \).
BLACK HUSBANDS

Tables Four through Eight show us what lies behind the disparities in the various sources of family income. The shortfall in black husband's earnings is decomposed in Table Four. As we saw in the previous section, the most serious gap is between black and white husbands. Here we see that the mean earnings coming from black husbands is only 42% that of white husbands. One of the first reasons for this gap is the fact that black families are 39% less likely than whites to have a husband present. We can also see that a lower percentage of black husbands -- only 95% as many -- have earnings compared to whites. There is also a large gap between the mean earnings of black and white husbands who have earnings -- black husbands mean earnings is only 70 percent as high as that of white husbands. While a slightly lower percentage of black husbands are civilians (97%) about 98 percent as many black husbands who are civilians are in the labor force. These figures are close but they still represent a shortfall for black husbands in comparison to white ones. However there is a much wider disparity in the number of weeks black and white husbands spend in the labor force--black husbands spend only 60 percent as many weeks in the labor force as do white husbands. While black husbands average employment rate (weeks worked/weeks in labor force) is virtually equal to that of white husbands, (meaning those husbands who are in the labor force spend practically all
### TABLE FOUR
DECOMPOSITION OF BLACK HUSBANDS’ MEAN EARNINGS CONTRIBUTION TO TOTAL FAMILY INCOME, 1987

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean Value For White Husbands</th>
<th>Mean Value For Black Husbands</th>
<th>Black/White Ratio of Means</th>
<th>Black/White Ratio of Means, 1979</th>
<th>Percent Change 1979-1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings of husbands...........</td>
<td>$19,668</td>
<td>$8,290</td>
<td>0.421</td>
<td>0.441</td>
<td>-4.41%</td>
</tr>
<tr>
<td>Percentage of families with husband present</td>
<td>0.843</td>
<td>0.512</td>
<td>0.607</td>
<td>0.645</td>
<td>-5.85%</td>
</tr>
<tr>
<td>Percentage who have earnings................</td>
<td>0.800</td>
<td>0.764</td>
<td>0.955</td>
<td>0.957</td>
<td>-0.20%</td>
</tr>
<tr>
<td>Earnings of those with earnings ≠ 0..........</td>
<td>$29,122</td>
<td>$20,389</td>
<td>0.700</td>
<td>0.717</td>
<td>-2.39%</td>
</tr>
<tr>
<td>Percent of husbands who are civilians.....</td>
<td>0.984</td>
<td>0.955</td>
<td>0.971</td>
<td>0.989</td>
<td>-1.86%</td>
</tr>
<tr>
<td>Percentage civilians in labor force.........</td>
<td>0.786</td>
<td>0.768</td>
<td>0.977</td>
<td>0.946</td>
<td>3.32%</td>
</tr>
<tr>
<td>Weeks in labor force of those in labor force</td>
<td>38.34</td>
<td>36.11</td>
<td>0.942</td>
<td>0.912</td>
<td>3.30%</td>
</tr>
<tr>
<td>(Weeks employed)/(weeks in labor force) for those in labor force</td>
<td>0.995</td>
<td>0.999</td>
<td>0.994</td>
<td>0.996</td>
<td>-0.17%</td>
</tr>
<tr>
<td>Hours worked per week.......................</td>
<td>44.04</td>
<td>40.82</td>
<td>0.927</td>
<td>0.928</td>
<td>-0.15%</td>
</tr>
<tr>
<td>Hourly earnings............................</td>
<td>14.40</td>
<td>10.25</td>
<td>0.712</td>
<td>0.806</td>
<td>-11.68%</td>
</tr>
</tbody>
</table>

My computations.
their time employed), black husbands work about 3.2 hours less per week than white husbands when they do work (about 93 percent as much as white husbands). Even more importantly, black husbands' average wages are about 30 percent lower than white husbands. In other words, black husbands earn only 70 percent as much per hour as do their white counterparts, another large factor behind the mean earnings contribution gap between black and white husbands.

Table Four shows that black husbands fall short on every factor determining their mean earnings contribution to family income. However, if we rank these factors according to the magnitude by which they contribute to the earnings gap, we see that the first most important factor is the lower probability of black families having a husband present. The second largest factor is lower mean earnings of black husbands who have earnings. Mean earnings is determined by hourly wages times length of time worked. If we look at hourly wages, weeks worked and hours worked per week, black men fall short on every factor, especially hourly wages.

Between 1979 and 1987 black husbands experienced declines in all but two of the factors determining family income. Even though they increased their relative labor force participation as well as the number of weeks they spent in the labor force, these gains were offset by declines in all the other factors, the most significant of which was hourly earnings. Whereas in 1979 black husbands made about 81% as much per hour on average
as whites, by 1987 they were making 71% as much money per hour as whites, about a 12% decrease.

In my opinion, this widening wage gap contradicts arguments against the use of family income as an indicator of black progress on grounds that it hides the labor market opportunities open to individual black workers for two reasons: first of all, my findings indicate a widening wage gap between black and white husbands. Second, its obvious that this wage gap affects black family income in a sizable way, especially since earnings of husbands is still the largest source of income for black families.

In sum, the three most significant factors contributing to the disparity in the mean earnings gap between black and white husbands in 1987 are 1) the percentage of families with husbands present 2) Lower earnings for those who have earnings. The biggest contributor to lower mean earnings is lower hourly wages. Hourly wages is also the factor which declined the most between 1979 and 1987.

BLACK WIVES

As we learned from the previous section comparing the relative composition of black and white family incomes, we saw that black wives earnings represent the second largest component of mean family income. However, black wives mean earnings contribution to total family income is only 72% as
Table Five
Decomposition of Black Wives' Mean Earnings Contribution to Total Family Income, 1987

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings of wives</td>
<td>$6,746</td>
<td>$4,844</td>
<td>0.718</td>
<td>0.784</td>
<td>-8.45%</td>
</tr>
<tr>
<td>Percentage of families with wives present</td>
<td>0.843</td>
<td>0.512</td>
<td>0.607</td>
<td>0.645</td>
<td>-5.85%</td>
</tr>
<tr>
<td>Percentage who have earnings</td>
<td>0.615</td>
<td>0.682</td>
<td>1.11</td>
<td>1.13</td>
<td>-2.13%</td>
</tr>
<tr>
<td>Earnings of those with earnings ≠ 0</td>
<td>$13,002</td>
<td>$13,876</td>
<td>1.07</td>
<td>1.07</td>
<td>-0.53%</td>
</tr>
<tr>
<td>Percentage in labor force</td>
<td>0.564</td>
<td>0.532</td>
<td>0.943</td>
<td>1.15</td>
<td>-17.69%</td>
</tr>
<tr>
<td>Weeks in labor force of those in labor force</td>
<td>27.16</td>
<td>30.61</td>
<td>1.13</td>
<td>1.14</td>
<td>-1.46%</td>
</tr>
<tr>
<td>(Weeks employed)/(weeks in labor force) for those in labor force</td>
<td>0.995</td>
<td>0.983</td>
<td>0.989</td>
<td>0.988</td>
<td>0.06%</td>
</tr>
<tr>
<td>Hours worked per week</td>
<td>34.39</td>
<td>37.12</td>
<td>1.08</td>
<td>1.05</td>
<td>2.90%</td>
</tr>
<tr>
<td>Hourly earnings</td>
<td>8.59</td>
<td>8.25</td>
<td>0.961</td>
<td>0.907</td>
<td>5.99%</td>
</tr>
</tbody>
</table>

My computations.
high as their white counterparts. What causes this shortfall? (See Table Five). If we decompose black wives earnings, we see that only 60% as many black families have wives present compared to white families. However the decomposition also reveals that more black wives actually have earnings (1.1 times more). The mean earnings of those who do have earnings is also slightly higher than it is for white wives. The literature supports this finding, suggesting that black wives earn more than their white counterparts by supplying more labor to the market (Mott, 1978, Jones, 1982, Cotton, 1989). However, my analysis shows that the percentage of black wives from primary families who are in the labor force falls slightly below that of white wives by about 3 percentage points.7 Black wives spend about three and a half more weeks in the labor force than do white wives (1.3 times higher than wives), and work about 3 hours more per week (1.1 times more

---

7 This aspect of my results do not match those in the literature on the labor force participation rates of black and white wives. According to the literature, black wife's labor force participation rates are higher than that of white wives and have remained so between 1979 and 1987. Upon discovering this discrepancy between my results and the published literature, I speculated that restricting my sample to primary families may have influenced this outcome. This suggests that black wives in primary families may have slightly labor force participation rates than their white counterparts. In order to test my suspicion, I compare the labor force participation rates for wives in all families (primary, related and unrelated) to those of wives from primary families using the 1988 CPS. I found that when the sample included all wives, black wives labor force participation rates exceeded those of white wives. On the other hand, in primary families, the LFPR for white wives was slightly higher than those for blacks.
hours than white wives). However, black wives average wages fall slightly below those of white wives by about 34 cents per hour.

As shown above, a higher proportion of black wives have earnings than white wives. Black wives have higher mean earnings, spend more weeks in the labor force and work more hours per week. However, the fact that fewer black families have wives present, their slightly lower labor force participation rates and lower hourly earnings combine to pull down their average earnings contribution to mean family income to 72% that of white wives. As Table Five shows, the three biggest factors contributing to this gap are (in order of significance) 1) a lower percentage of black families with wives present 2) lower hourly earnings and 3) lower labor force participation. Traditionally, black wives have participated in labor force at a higher rate than white wives. (Cotton, 1989, Mott, 1978, Jones, 1982) However, this analysis indicates that for primary families in 1987, there was a slightly smaller percentage of black than wives in the labor market. This could be another symptom (or effect) of declining growth rates in black women's labor force participation, compared to the increasing growth rates for white women.

Between 1979 and 1987, black wives experienced declines in all but three factors -- average employment rates, hours worked per week and hourly earnings. So while black wives
hourly earnings became increasingly similar to those of white wives, number of hours they worked per week stayed higher than that of white wives, increasing slightly from 1.05 to 1.08 times higher than the number of hours worked by their white counterparts. Relative employment ratios remained almost constant at 99 percent. Nevertheless, these small gains were offset by slowing growth in black wife's relative labor force participation rates, percentage of families with wives present and percentage of black wives with earnings. The largest fall was in relative labor force participation. Whereas in 1979 the percentage of black wives in the labor force was about 1.15 times higher than the percentage of white wives, by 1987, black wife's relative labor force participation rate had dropped behind that of white wives, decreasing the ratio by about 18 percent from 1.15 to .94. Declining relative labor force participation rates of black wives has been widely documented, mainly as a consequence of sluggish growth in black women's LFPR compared to rapid increases for white wives. The next largest fall was in the relative percentage of families with black wives present (a 2 percentage point decline in the ratio). The third largest decline was in the relative percentage of black wives who had earnings, (about a 2% decline in the ratio). So between 1979 and 1987, we see that relative declines in black wife's labor force participation, the percentage of black families with wives and the percentage of black wives who have earnings offset
### TABLE SIX
DECOMPOSITION OF SINGLE BLACK FATHERS' MEAN EARNINGS
CONTRIBUTION TO TOTAL FAMILY INCOME, 1987

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean Value For White Males</th>
<th>Mean Value For Black Males</th>
<th>Black/White Ratio of Means</th>
<th>Black/White Ratio of Means, 1979</th>
<th>Percent Change, 1979-1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings of single males........</td>
<td>$660</td>
<td>$718</td>
<td>1.088</td>
<td>1.08</td>
<td>0.80%</td>
</tr>
<tr>
<td>Percentage of single families with male heads present</td>
<td>0.036</td>
<td>0.06</td>
<td>1.667</td>
<td>1.58</td>
<td>5.69%</td>
</tr>
<tr>
<td>Percentage who have earnings</td>
<td>0.638</td>
<td>0.727</td>
<td>1.139</td>
<td>0.955</td>
<td>19.32%</td>
</tr>
<tr>
<td>Earnings of those with earnings ≠ 0............</td>
<td>$24,192</td>
<td>$16,509</td>
<td>0.682</td>
<td>0.711</td>
<td>-3.99%</td>
</tr>
<tr>
<td>Percent of male heads who are civilians........</td>
<td>0.993</td>
<td>0.996</td>
<td>1.003</td>
<td>1.00</td>
<td>0.20%</td>
</tr>
<tr>
<td>Percentage civilians in labor force............</td>
<td>0.750</td>
<td>0.71</td>
<td>0.947</td>
<td>0.903</td>
<td>4.86%</td>
</tr>
<tr>
<td>Weeks in labor force of those in labor force...</td>
<td>36.420</td>
<td>32.46</td>
<td>0.891</td>
<td>0.885</td>
<td>0.74%</td>
</tr>
<tr>
<td>(Weeks employed)/(weeks in labor force) for those in labor force................</td>
<td>0.9901</td>
<td>0.9624</td>
<td>0.992</td>
<td>0.997</td>
<td>-0.52%</td>
</tr>
<tr>
<td>Hours worked per week...........................</td>
<td>42.810</td>
<td>39.66</td>
<td>0.926</td>
<td>0.898</td>
<td>3.15%</td>
</tr>
<tr>
<td>Hourly earnings..................................</td>
<td>12.150</td>
<td>8.93</td>
<td>0.735</td>
<td>0.827</td>
<td>-11.11%</td>
</tr>
</tbody>
</table>

My computations.
relative increases in hours worked per week and wages to result in a widening gap between the mean earnings contributions, in dollar value, of black and white wives to total family income. Despite increases in wages between 1979 and 1987 as slight gap still exists. As, discussed in the literature review, declining demand for the labor of black women might be the factor behind the decreasing relative LFPR for black wives. This is especially likely since black wives exhibit all of the characteristics economists argue are conducive to increased rates of labor force participation.

SINGLE PARENT FAMILIES: BLACK FATHERS

As Table Six shows, the mean earnings contribution of single black fathers is the smallest component of black family income. However, single black fathers' mean earnings contribution to family income is about 1.1 times higher than that of single white fathers. This is true despite the fact that single black fathers with earnings earn only 68% as much as their white counterparts. The main reason for this higher mean earnings contribution is that 1.7 times more black families headed by single fathers than white families. While about the same proportion of each group are civilians, a slightly higher proportion of white single fathers are in the labor force. Single black fathers also spend fewer weeks in the labor force than do single white fathers (about 4 weeks less). While both black and white single fathers work almost
the whole time they are in the labor force, single black fathers work about 3 hours less per week than their white counterparts and earn significantly lower wages— they earn only 73% as much an hour as white single fathers.

The data suggests that one of the main reasons why black fathers’ average earnings contribution to total family income is higher than that of white single fathers is because there is a higher proportion of black families presided over by single fathers than there are in the white population. In addition, the mean earnings of single fathers who have earnings is significantly lower than that of their white counterparts (falling short of parity by 32 points). As we can see in Table Six, there are three primary factors contributing to this disparity. The first and most important factor is hourly earnings. Single black fathers earn only 73% as much as single white fathers per hour. The second most important factor is lower labor force participation rates, while the third is fewer hours worked per week.

Although single black fathers experienced relative increases in 5 out the 8 factors between 1979 and 1987, they experienced marked declines in hourly earnings ratios and mean earnings ratios for those with earnings (which is partially the result of declines in hourly earnings). These factors, along with number of weeks in the labor force, and hours worked per week are the biggest contributors to the deflation of single father’s mean earnings contribution. But since their
proportion of black family income is rising faster than that of white single fathers, their contribution to total family income is relatively higher than that of their white counterparts.

These results clearly show that inequalities in factors like wages, labor force participation rates and hours worked per week constrain single black fathers ability to provide for their families, thus contributing to the black-white family income gap. Although the earnings of single black fathers represents smallest proportion of mean black family income, they are one of the fastest growing sources, which means that their labor market performance will have an increasingly important effect on overall mean black family income. In my opinion, this finding represents yet more evidence to contradict the argument that individual earnings is a far superior indicator of black progress than family income on ground that it shields the labor market prospects of black individuals. In this case, as in the case of black husbands and wives, its quite apparent that the labor market prospects of black men negatively affect their ability to contribute to total family income.

SINGLE PARENTS: SINGLE BLACK MOTHERS

As shown in the previous section, black mother’s earnings as a component of family income is almost four times higher than that of single white mothers. One of the reasons behind this fact is the unusually high proportion of black families headed
TABLE SEVEN
DECOMPOSITION OF SINGLE BLACK MOTHERS' MEAN EARNINGS CONTRIBUTION
TO TOTAL FAMILY INCOME, 1987

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings of single mothers........</td>
<td>$1,245</td>
<td>$3,163</td>
<td>2.54</td>
<td>2.67</td>
<td>-4.97%</td>
</tr>
<tr>
<td>Percent of families with single female head present........</td>
<td>0.120</td>
<td>0.400</td>
<td>3.33</td>
<td>3.94</td>
<td>-15.50%</td>
</tr>
<tr>
<td>Percentage of those present who have earnings..........</td>
<td>0.684</td>
<td>0.591</td>
<td>0.864</td>
<td>0.86</td>
<td>0.60%</td>
</tr>
<tr>
<td>Earnings of those with earnings ≠ 0.................</td>
<td>$15,143</td>
<td>$12,498</td>
<td>0.825</td>
<td>0.839</td>
<td>-1.60%</td>
</tr>
<tr>
<td>Percentage in labor force.........................</td>
<td>0.654</td>
<td>0.592</td>
<td>0.905</td>
<td>0.872</td>
<td>3.81%</td>
</tr>
<tr>
<td>Weeks in labor force of those in labor force.........</td>
<td>31.07</td>
<td>25.68</td>
<td>0.827</td>
<td>0.810</td>
<td>2.04%</td>
</tr>
<tr>
<td>(Weeks employed)/(weeks in labor force) for those in labor force........</td>
<td>0.984</td>
<td>0.944</td>
<td>0.960</td>
<td>0.973</td>
<td>-1.37%</td>
</tr>
<tr>
<td>Hours worked per week................................</td>
<td>38.01</td>
<td>37.25</td>
<td>0.980</td>
<td>0.982</td>
<td>-0.25%</td>
</tr>
<tr>
<td>Hourly earnings.......................................</td>
<td>8.31</td>
<td>7.07</td>
<td>0.851</td>
<td>0.889</td>
<td>-4.29%</td>
</tr>
</tbody>
</table>

My computations.
by single mothers relative to white families. There are 3.6 times more black families headed by single mothers than there are in the white population. However, the earnings contribution of black single females does not match that proportion, which indicates the general earnings gap between black and white single mothers. In other words, if all factors determining earnings (besides percent of families with single mothers present) were equal (if single black mothers earned just as much as white ones) then the earnings ratio should match the proportion of families with single mothers present. To uncover this gap, we will compare the factors determining the mean earnings contribution of single mothers. (See Table 7).

If we look the proportion of single mothers with earnings, we see that only 86% of single black mothers have any earnings at all, compared to white ones. Furthermore, the those single black mothers who do have earnings earn only 83% percent as much as their white counterparts -- about $2,645 less than single white mothers, annually. Black single mothers also fall short in labor force participation. According to my calculations, only 90.5% as many single black mothers participate in the labor force as do white single mothers. 8

8 This is consistent with published CPS data for 1988, which show that only 88% as many black female heads participating in the labor force as white ones. See table 19, "Employment Status in March 1988, Poverty Status in 1987 of Family Householder and Unrelated Individuals, in 1988 CPS Report on Poverty and Household Income, pp.87.
They also spend less time in the labor force, spending only 83% as many weeks as their white counterparts. While working single black mothers' average employment rate is not far behind that of single white mothers (it is 96% of white mother's employment rate) the number of hours they work per week is almost as high (98%) as their white counterparts. However, single black mother's hourly earnings fall behind those of single white mothers by quite a bit--they earn only 85% as much money per hour.

So when we evaluate all the factors determining the relative earnings of single mothers, we see that black women fall short on every factor except the percentage of families presided over by a single female. If we rank the factors, we see that lower average earnings for those who have earnings is one of the main reasons why single black mothers' family income does not exceed single white mothers' contribution to family income by the same proportion that the percentage of black families head by single mothers exceeds that of whites. The most important factor contributing to this shortfall is fewer weeks spent in the labor force. The second largest factor is lower hourly earnings and the third is a lower percentage of those present who have earnings.

If we compare these ratios with those from 1979, we see that there were declines in 5 out of the 8 factors determining relative income: hourly earnings, average employment rate, hours worked per week and the percent of families headed by
single mothers. The three ratios undergoing the biggest declines in order of magnitude were 1) hourly earnings, which dropped by 4.3% 2) percent of families head by single mothers which dropped by 2.5% and 3) average employment rate of those who worked, which dropped by 1.3%. The fact that black-white family income gap widened, despite relative drop in the number of black female headed families directly contradicts the argument that declining black family incomes are solely related to changes in family structure. In this case, white and black family structures are becoming similar, while family income is still diverging.

The two ratios which increased the most were, in order of magnitude were: 1) labor force participation rate, which increased by 3.8 percent, and 2) weeks in the labor force, which increased by 2.1%. The percentage of single wives present stayed just about the same.

Despite the fact that between 1979 and 1987 single black wives increase their relative labor force participation rate as well as the number of weeks they spend in the labor force, declines in relative wages and average employment rates combined to reduce the average earnings of those single black mothers who had earnings. Furthermore, fewer weeks spent in the labor persists over 8 year period as the biggest contributor to the mean earnings gap between black and white single wives, while wages and percent of those with earnings became the second and third largest factors.
TABLE EIGHT
DECOMPOSITION OF BLACK OTHER FAMILY MEMBER'S MEAN EARNINGS
CONTRIBUTION TO TOTAL FAMILY INCOME, 1987

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>Mean Value for Whites</th>
<th>Mean Value for Blacks</th>
<th>Black/White Ratio of Means</th>
<th>Black/White Ratio of Means, 1979</th>
<th>Percent Change, 1979-1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings of other family members</td>
<td>$4,739</td>
<td>$4,539</td>
<td>0.958</td>
<td>0.856</td>
<td>11.94%</td>
</tr>
<tr>
<td>Number of family members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 or older, per family.......................</td>
<td>0.498</td>
<td>0.729</td>
<td>1.464</td>
<td>1.69</td>
<td>-13.36%</td>
</tr>
<tr>
<td>Percentage of family members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 or older with earnings.....................</td>
<td>0.636</td>
<td>0.498</td>
<td>0.783</td>
<td>0.697</td>
<td>12.39%</td>
</tr>
<tr>
<td>Earnings of other family members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with earnings ≠ 0..............................</td>
<td>$7,357</td>
<td>$7,140</td>
<td>0.971</td>
<td>0.934</td>
<td>3.92%</td>
</tr>
</tbody>
</table>


My computations.
Since the proportion of black families head by single mothers is 3.9 times higher than the proportion of white ones, then their mean earnings contribution to total family income would have been about 3.9 times higher than that of white mothers, if the factors determining earnings were equal to those of white women. But in fact, shortfalls in all of these factors, most notably weeks spent in the labor force, hourly earnings and percent of single wives with earnings, combine to prevent single black females' mean income contribution from matching their proportion in the population.

OTHER FAMILY MEMBERS

As Table Eight shows, black families do not receive as much income from the earnings of other family members as whites do. Their mean earnings contribution is only 96% as high as white other family members mean contribution. However, black families have about one and a half time more family members over 14 than do white families. This means that, if all the factors determining earnings from this source were equal (except percentage of families with other members over 14) then the mean earnings contribution of other family members should be one and a half times higher than whites. However, it is not, and the main contributors to this shortfall are: 1) Only 78% of black family members over 14 have earnings compared to whites and 2) the mean earnings of those with earnings is only 97% that of their white counterparts.
If we compare these ratios to their 1979 levels, we see that a lower percentage of other family members 14 or older with earnings as well as lower mean earnings for people in this category were the two biggest contributors to the shortfall in black other family member's contribution to mean family income. However, this gap narrowed over the 8 year period. Black family members mean earnings contribution increased from 86% to 96% of white family members. This occurred despite the fact that the number of other family members 14 or older in white families inched closer to that of blacks by about 13.4%. The narrowing gap earnings contribution gap between black and white other family members probably occurred because the percentage of other family members with earnings in black families relative to white increase by about 12.3 percent, while the mean earnings ratio for other family members came closer to unity.

In sum, despite the fact that in 1987 blacks have one and a half times as many family members (besides mothers and fathers) 14 or older as do white families, they receive only 96% as much from them as do white families, due mainly to a lower percentage of family member 14 or older with earnings. This disparity could be related to the high unemployment rates of black youth, relative to white youth. Despite relative increases in the percentage of other family members with earnings and in the mean earnings of those with earnings, blacks still receive less income from other family members.
than do whites, even though earnings of black family members as a proportion of total family income is much larger than that of whites.
CHAPTER 5:
DISCUSSION OF RESULTS,
POLICY IMPLICATIONS,
AND CONCLUSION
5.0 This chapter summarizes the results, and discusses their implications.

5.1 DISCUSSION OF RESULTS

Besides disparities arising from uneven access to transfer and non-transfer income, this analysis has shown that the black-white family income gap, (which has widened between 1979 and 1987) can be traced to shortfalls in factors determining earnings from each source of family income. Contrary to arguments which suggest that differences in family structure are the most important determinants of the white black family income differential, this analysis has shown that significant differences exists even between members of similar family structures. While I am not arguing that family structure is not an important determinant of family income, I am suggesting that it is not the only nor the most important factor. As suggested before in the literature review by both Bane (1986) and Jennings (1990), female headship does not in itself cause poverty. The decomposition results demonstrate that each source of black family income suffers from some form of earnings inequality which diminishes their capacity to contribute to overall family income.

A helpful device for surveying the sources of the black white family income gap is to rank the sources in order of their size as a proportion of family income, rank the mean earnings ratios for each source, and then compare the two measures. This has been done in Figure 1.
Table Nine helps demonstrate where the largest income gaps arise by showing which sources represent the largest sources of family income as well that sources' mean earnings contribution ratio. As we saw earlier, the largest source of the black-white family income gap is the earnings of black husbands. Although black husbands are the largest source of income for black families (.313), they suffer from the largest gaps in the dollar value of their mean earnings contribution (.421). In other words, even though black families get the largest portion of their income from black husbands, the average amount black husbands contribute to total family income is only 42% as large as that of white husbands. When we decomposed the factors determining earnings and compared...
black and white mean ratios, we saw that family structure (the lower probability of black families having a husband present) was one of the most important factors contributing to the gap. This finding seemingly supports the "deteriorating black family structure" argument which holds that increasing female headship is the primary cause of declining black family incomes.

Smith and Welch (1986) suggest that problems endemic to the black family, not the labor market are solely responsible for the declining fortunes of black families. However, if this was the case, then we would not expect to find factors like lower mean earnings for those who have earnings and lower wages to be the second and third most important factors contributing to the gap. But this is indeed the case for 1987. As a matter of fact black husbands suffer from serious shortfalls in all the factors determining their earnings contribution to family income. They also experienced declines in all of the factors which are the largest contributors to the gap -- especially hourly earnings. This finding seems to contradict Smith and Welch's "closing gap" and Freeman's "end of discrimination" hypotheses on two grounds: first of all, it is not true that "deteriorating" black family structures are the only culprits responsible for the widening family income gap. A substantial part of this widening gap can be traced to the declining labor market prospects of black husbands. Second, the number of white single parent families
is rising too, although not at as fast a clip as black families. Does this reflect a growing problem endemic to white families as well, or simply a changes brought on by increased demand for women’s labor, declining family wages, and general shifts in social norms regarding family structures?

Several trends may be responsible for the widening gap between black and white husbands. The family wage has deteriorated in general, forcing more wives of both races to increase their work rates. During the 1980s, the dispersion between the earnings of high and low skilled workers widened. (Blackburn, Bloom and Freeman, 1980) Minimum wages also declined, exacerbating the earnings gap black and white males. All of these trends, stimulated by economic restructuring, have fallen with particular force on black men. As pointed out in the literature review, the black-white male income ratio for all ages decreased significantly between 1979 and 1987 from an all time high of .60 to .56. This deterioration, Cotton (1989) argues, is associated with considerable changes in the industrial and occupational distribution of black men in the 1980s. Blacks men experienced a shift from blue collar occupations with higher earnings ratios to service and white collar jobs characterized by lower black-white earnings ratios and higher levels of instability. As Tilly (1990) has shown, black males are also disproportionately represented in involuntary part time employment. The breakdown in affirmative action, coupled with the erosion of internal labor market, and
occupational shifts are also likely causes behind the decreasing returns to education for black male college graduates. Surely the contraction of employment in the public sector, traditionally such a large source of employment for blacks, is contributing to the reversal of the convergence trend for black males.

While this study does not afford me a great deal of precision in quantifying, relating and ranking each particular trends' effect on black husbands, it does provide me with the opportunity to show that the combined effects of these trends surface in the form of lower earnings, lower wages for black husbands, which in turn translates into lower family incomes.

Black wives have traditionally been major contributors to black family income, a role that white wives have only recently come to play. This is primarily because black males' lower wages meant that black wives could not afford to stay out of the labor market. As the decomposition results show, black families rely more heavily on the earnings of wives than do white families. Although wives earnings constitute the second largest source of income for both black and white families, black wives earnings comprise are larger proportion of family income than do the earnings of white wives. Nevertheless, black wives' mean earnings contribution, in dollar value is 72% less than that of white wives. Of course, the lower proportion of black families with wives present is a major contributor to this disparity. However, relative
declines in labor force participation rates between 1979 and 1987, coupled with a persistent yet narrowing wage gap combined to deflate black wives' contribution to total family income, despite the fact that over the seven year period, black wives managed to work more hours per week and spend more weeks in the labor force than their white counterparts. It is likely that decreased demand for black women's labor is the most likely force behind slowing labor force participation rates and declining numbers of weeks spent in the labor force. This is especially likely since black wives exhibit both a more tenacious commitment to the labor force, as well as all of the characteristics we expect would lead them to increase their rates of labor force participation at a rate commensurate to or faster than that of white women.

Some of the same trends affecting black husbands affect black wives' ability to contribute to family income. In particular, Jones cites the deindustrialization of major urban centers as a major factor. Another is the rapid expansion of the secondary service sector and the proliferation of involuntary part time employment. Black women have the highest rate of involuntary part time employment (which is heavily concentrated in the secondary sector) compared to the general population. (Tilly, 1986). As is likely for black husbands, the contraction of government employment is another factor. It has been widely documented that a high percentage of black women who attained managerial status have done so in the
public sector, presiding over the administration of social services.

In sum, the decomposition results show that although the decreasing frequency of married couple families indeed contributes to the black white family income gap, there are significant differences even between blacks and whites presiding over "intact" families, or married couple families. Black husbands suffer from huge gaps in relative earnings contributions which in turn are determined by shortfalls in every factor determining income, most notably, lower wages. Black wives suffer from sluggish labor force participation growth rates, especially those in primary families, whose labor force participation rates dropped slightly behind those of their white counterparts between 1979 and 1987. Apparently, recent labor market trends are having the combined effect of eroding black couples' ability to provide for their families.

Black families are also increasing their reliance on other family members, - the third largest source of black family income - compared to whites, despite the fact that the number of children born to black mothers is dropping faster than that for white mothers. (Jones, 1982) This is also surprising given the unusually high rate of youth unemployment -- 50 to 70% in some urban areas. (Jennings, 1990) Blacks are probably being forced to rely more on the earnings of other family members because of the declining earnings of family heads and
spouses. As we saw previously, factors such as significantly lower wages for men and slowing labor force participation rates for women are reducing married couples' capacity to maintain families. This trend supports Harrison and Gorhams' hypothesis that black families must package incomes -- that is, rely on the earnings of more than one earner, to maintain middle income status.

Female heads, the fourth largest source of black family income, are highly over represented compared to white female heads. In this data set, their percentage rose from 40% of all black families to 43% (faster than the rate of increase for white families). This finding could be interpreted as supporting the argument positing that the socio-economic problems facing blacks are the direct result of the rapid growth of female headed households in the black community--not racism, or persistent labor market discrimination. It is true that a single parent family has a greater chance of being impoverished than a two parent family. But, as James Jennings (1990) points out,

"...when the level of education, age and region are controlled, only 28% of white female headed families live in poverty, compared to 53.8% of black female headed families in 1982. This suggests that something other than family structure or perhaps, something in addition to family structure, explains the poverty of some blacks." (pp. 17)

Indeed, this conclusion is born out by my decomposition results in the sense that there is a great deal of earnings inequality between black and white single female heads. When
comparing single female heads' labor force characteristics, we see that black female, heads fall short on every factor (except percentage of families with single female head present), especially lower average earnings, wages, and the number of weeks spent in the labor force. This last factor persisted over the 8 year period as the largest contributor to the mean earnings gap between black and white single female heads.

In sum, these results show that single black female heads face considerably more labor market barriers than do their white counterparts. Cotton (1989) argues that part of the disparity is due to the changing composition of black female heads. Between 1970 and 1987, the majority of single black female heads went from being married or separated to single (never married), while most white female heads went from being widows to divorcees. Thus over time, more black single parent families became headed by never married single women while white single parent families became increasingly head by divorcees. The average income of single women in 1987 was only 59% that of divorced women. Surprisingly enough, white female headed families on average had even greater net wealth than the average black married couple family (Cotton, 1989). This disparity in income is surely due, in part, to white women's higher levels of child support, alimony, and other property or incomes included in divorce settlements.
Black female heads also suffer from the general labor market problems plaguing black wives, especially those who are less educated. As Jones (1982) points out, equal educational levels do not ensure black women equal access to the more preferred occupations. Black women suffer more severe penalties for limited schooling. Only those with four or more years of college have occupational distributions that resemble those of white women. White women are able to move into more desirable jobs with fewer years of schooling than black women, while black women with increased education have more trouble moving out of undesirable jobs. Poorly educated white women also fare better occupationally than poorly educated black women. For example, in 1983, most black women with less than an 8th grade education were employed in service work; the same was true for less than half of white women in the same category. A high proportion of white women with limited education held higher paying technical, operative, administrative support, sales and even management positions, while the same was true for very few black women. (Jones, pp. 23)

The nature of the welfare system may also discourage or prevent single black women with dependents from moving out of low paying secondary employment. Critiques of programs attaching employment and training requirements to AFDC argue that such programs do nothing but feed welfare recipients into secondary employment, while doing little to advance their
skill or occupational status. Furthermore, inadequate state supported medical and childcare assistance forces a large number of mothers who do pass through such programs to return to their welfare status. (Cronin, et. al. 1988)

Evidence from this study suggests that family structure, per se, is not the main reason for the widening black-white family income gap. As we have seen, there are serious labor market inequalities even between people of similar family structures, which further contribute to the black white family income gap. This analysis also shows that non-transfers and transfers, the fifth and sixth largest sources of black family income, are becoming decreasingly available to black families. There is and always has been a serious gap in the amount of non-transfer income (interest, dividends, rentals, trust incomes, pensions, alimony child support and other income) available to black and white families. Between 1979 and 1987, the black-white non-transfer mean income ratio decreased by 26% percent from .69 to .51, by far the largest decrease for any of the ratios. One factor behind this trend may be the worsening income polarization occurring over the 1980s which fell with particular force on the black community. This polarization may have decreased blacks ability to invest in properties and stocks as well as their ability to pay alimony and child support. On the other hand, white families access to, or reliance on this form of income increased over the 8 year period.
Black families' access to transfer incomes (social security or railroad retirement, supplemental social security, public assistance, veterans comp, unemployment or workmen's comp) decreased during this period, while white families' access stayed about the same. Its relative proportion of black family income fell about 12%. This declining access to transfer programs for blacks is probably due to reductions in federal government spending on transfer programs during the 1980s. According to Moss and Tilly (1990) "...the real value of transfer programs has declined steadily since the mid 1970s and the conditions for the receipt of assistance have become more strict in the 1980s." (pp. 60)

Single father's, the smallest source of family income, are also the most rapidly growing source. Although the black population has a higher proportion of them than the white population does, they too face significant inequality, most notably in hourly earnings -- they only earn 73% as much per hour as their white counterparts.

This analysis has shown that the white black family income gap can be traced not only to differences in family structure, but even more importantly, earnings inequality between black and white family members, as well as differential access to non-labor income.

Table Ten helps to summarize the results of the decomposition analysis, as well as the main sources of earnings inequality for all earners in black families.
TABLE TEN
BLACK TO WHITE RATIOS OF MEANS FOR THE FACTORS DETERMINING
THE EARNINGS CONTRIBUTION OF EACH SOURCE TO
TOTAL FAMILY INCOME, 1987

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings</td>
<td>0.421</td>
<td>-4.41%</td>
<td>0.718</td>
<td>-0.46%</td>
<td>2.540</td>
<td>-4.97%</td>
<td>1.088</td>
<td>0.00%</td>
<td>0.958</td>
</tr>
<tr>
<td>Percentage of persons in role j who are civilians</td>
<td>0.607</td>
<td>-5.05%</td>
<td>0.607</td>
<td>-5.05%</td>
<td>3.330</td>
<td>-15.50%</td>
<td>1.667</td>
<td>5.69%</td>
<td>1.464</td>
</tr>
<tr>
<td>Percentage of persons in role j who are civilians</td>
<td>0.607</td>
<td>-5.05%</td>
<td>0.607</td>
<td>-5.05%</td>
<td>3.330</td>
<td>-15.50%</td>
<td>1.667</td>
<td>5.69%</td>
<td>1.464</td>
</tr>
<tr>
<td>Earnings of those with earnings $0</td>
<td>0.700</td>
<td>-2.39%</td>
<td>1.110</td>
<td>-2.13%</td>
<td>0.864</td>
<td>0.60%</td>
<td>1.139</td>
<td>19.32%</td>
<td>0.783</td>
</tr>
<tr>
<td>Percent of persons in role j who are civilians</td>
<td>0.977</td>
<td>3.20%</td>
<td>0.977</td>
<td>3.20%</td>
<td>0.943</td>
<td>-17.69%</td>
<td>0.905</td>
<td>3.81%</td>
<td>0.947</td>
</tr>
<tr>
<td>Percent of persons in role j who are civilians</td>
<td>0.977</td>
<td>3.20%</td>
<td>0.977</td>
<td>3.20%</td>
<td>0.943</td>
<td>-17.69%</td>
<td>0.905</td>
<td>3.81%</td>
<td>0.947</td>
</tr>
<tr>
<td>Weeks in labor force of those in labor force</td>
<td>0.942</td>
<td>3.00%</td>
<td>0.942</td>
<td>3.00%</td>
<td>1.130</td>
<td>-1.46%</td>
<td>0.827</td>
<td>2.04%</td>
<td>0.891</td>
</tr>
<tr>
<td>(Weeks employed/weeks in labor force) for those in labor force</td>
<td>0.994</td>
<td>0.17%</td>
<td>0.994</td>
<td>0.17%</td>
<td>0.989</td>
<td>0.06%</td>
<td>0.960</td>
<td>-1.37%</td>
<td>0.992</td>
</tr>
<tr>
<td>Hours worked per week</td>
<td>0.927</td>
<td>-0.15%</td>
<td>0.927</td>
<td>-0.15%</td>
<td>1.080</td>
<td>2.90%</td>
<td>0.980</td>
<td>-0.25%</td>
<td>0.926</td>
</tr>
<tr>
<td>Hourly earnings</td>
<td>0.712</td>
<td>-11.68%</td>
<td>0.712</td>
<td>-11.68%</td>
<td>0.961</td>
<td>5.99%</td>
<td>0.951</td>
<td>-4.29%</td>
<td>0.735</td>
</tr>
</tbody>
</table>

* Means for other family members 14 or older.

My computations.
As we can see in Table Ten, a consistent source of earnings inequality for all earners in black families is lower wages. Black husbands, wives, and single parents suffer from lower wages. Black husbands, wives and single parents also suffer from lower labor force participation rates. Furthermore, all sources, except for black wives, fall short on weeks spent in the labor force. This of course, in addition to lower wages, is what causes all sources, except for black wives to fall short on mean earnings.

For black husbands and single fathers, hourly earnings is the factor which decreases the most between 1979 and 1987. Black single mothers also experience a small decrease in hourly earnings. However, more important factor affecting the earnings capacity of black women, especially black wives is labor force participation rate. Although all income suffer from lower labor force participation rates, black wives were the only source to experienced a large relative decrease (-17.69%) between 1979 and 1987.

In order to get an idea of the relative importance of each factor's contribution to the overall income gap, I have developed a scoring system for the ratios, which compares each factor to its ideal value. This method is similar to calculating a grade point average. I simply calculate the mean

---

9 data on hourly earnings, labor force participation, weeks in the labor force, weeks worked in the labor force, and hours worked per week for other family members were not obtained for this study.
ratio for each factor over all the sources. I call the result
the aggregate factor. It can also be thought of as the
aggregate gap. I assume that a score of one represents
black-white equality for a particular factor, while anything
below one represents an overall shortfall in that factor for
black earners. The lowest aggregate ratio represents the
factor where family earners suffer from the largest
shortfalls.

Excluding the factor representing differences in family
structure (1.15), we see that blacks fall short on every
aggregate factor determining their earnings contribution to
total family income. Table Ten shows that the largest gap
occurs in hourly earnings. The second largest gap occurs in
mean earnings, which is determined, in part by hourly
earnings. The third largest gap occurs in labor force
participation, while the fourth largest gap, which also
affects mean earnings, is the number of weeks spent in the
labor force. Table Nine also shows that hourly earnings, the
factor in which black earners suffer the largest shortfall,
dropped for 3 out of the four sources of earnings for which
this data is present.

To conclude, my decomposition results show that lower wages
and lower labor force participation rates are the two biggest
contributors, besides differences in family structure, to the
black-white family income gap. Even if there were no
differences between black and white family structures, these
sources of earnings inequality stemming from differences in the labor force activity of black men and women would still exist.

As shown above, black men suffer from very large wage gaps, while black women suffer more from sluggish growth in labor force participation rates. I argue that institutional, industrial and occupational changes taking place during the 1980s had the combined effect of decreasing black family earners wages as well as decrease the demand for black women workers. These effects, in turn, helped to erode the income generating ability of the average black family.

5.2 POLICY IMPLICATIONS

Policy implications depend on the theoretical framework one uses to diagnose the problem. According to Moynihan (1965), and Smith and Welch (1986), the problem of black family income is a problem related only to deteriorating black family structures, which in turn, has something to do with decreasing responsibility of black males, the breakdown of the marriage ethic, and a general moral and cultural deficit in black ghettos. It has nothing to do with the labor market prospects of black individuals. This line of thought might prescribe policies and programs designed to discourage the formation of female headed families by restoring whatever values and ethics policy makers deem necessary to encourage marriage among blacks.
According to Wilson (1982), and Darity and Myers (1988), declines in black family incomes are also related to changes in family structure. However, the see the proliferation of female headed households as fueled by the declining economic prospects of black males. Wilson labels this causal determinant as the declining pool of marriageable black males (meaning the declining pool of employed, decently paid black men). Darity and Myers characterize the process as caused by the economic marginalization of black men. Both theoretical frameworks assume that declining black family income is solely determined by the economic plight of black males, and therefore, solvable by focusing exclusively on the problems of black males.

While I do not dispute that there is indeed a strong relationship between the economic plight of black males and the declining fortunes of black families, I do not think it is the only factor policy makers should focus on when developing strategies to eradicate racial inequality, especially between families. As this study has shown, the widening family income gap can be traced to labor market inequalities for all members of the black family, as well as differential access to non-labor income. The lower wages and lower labor force participation rates are the most consistent sources of earnings inequality for earners in black families. On this basis, I argue that policy makers should take a more integrated approach to the problem of black-white family
income inequality, with solutions designed to solve the labor market problems of both black men and women, as well as crafting forms state and market support for "non-traditional" families.

One of the first tasks might be to develop a nationally coordinated employment and training system, integrated with the existing educational system which provides not only relevant training, but long range career planning and retraining options. This education and training system should be supported by an aggressive affirmative action program. Hopefully, policy makers can craft a system designed to enhance instead of inhibit the occupational mobility of non-college graduates, in the context of a rapidly changing skill and technical needs. However, this system cannot compensate for dilapidated school systems. These too must be reinvested in and reinvigorated with increased federal and state funding.

We also need to revise what is left of current affirmative action and equal employment opportunity programs, so that they are capable of dealing with transformations in firm structures and hiring and promotion practices. Affirmative action measures designed to increase the representation of blacks in higher educational institutions need to be reinvigorated, since as Noyelle argues, firms are increasing their reliance on educational credentials, as entrance criteria rather than on internal labor markets.
Government must also improve the relationship between the spheres of production (the labor market), the state, and reproduction (the family). As Cronin et al. (1988) argue, neither the state nor the labor market are very accommodating or supportive of certain family types. This would include providing a level of child care and medical support for single parent families that would allow parents to make a successful permanent transition from welfare to work. Second, it would also involve measures to make sure that employment and training programs attached to welfare recipiency do not simply channel women (who are the majority of recipients) into secondary employment, but make employers provide training and placement in more non-traditional jobs, as well as jobs offering comparable worth. More importantly, a fundamental change needs to be made in the quality of work available to most black men and women.

5.3 CONCLUSION

In this study, I have argued that family income is a better indicator of black progress than individual earnings because it represents the combined effect of the labor force activities of several different family members. Economists like Smith and Welch (1986) claim family income is a terrible indicator of black progress because problems endemic to the family, not the labor market, shield the opportunities open to black individuals. They also claim that affirmative action measures are unnecessary, because steady improvements in black
education are causing a racial convergence in individual earnings. Others, like Wilson and Darity and Myers relate the widening black-white family income gap to changes in family structure but they have a very mechanistic concept of the relationship. According to them, the economic plight of black males, or the declining pool of marriagble black men leads to more female headed families, and there for more poverty.

Both of these approaches fall short in that they focus on one dimension of the problem (i.e. individual earnings of males, changes in family structure or the relationship between the two). However, a third mode of analysis, which has been adapted for the purposes of this study, considers the effects that differences in the labor force activity of several family members, differential access to non-labor income and differences family structure have on the black-white family income gap. What I have done in this study, which has not been done before, is attempt to assess the relative importance of factors such as hourly earnings, labor force participation and family structure to the black-white family income gap, as well as how changes in those factors over time have affected the gap.

I have found that besides black families' limited access to non-labor income, the most important sources of the black-white family income gap are lower wages and lower labor force participation rates. The wage gap is particularly severe for black men, widening significantly between 1979 and 1987. The
failure of black women's labor force participation rates to grow at as fast a rate as that for white women is seriously eroding black wives' contribution to overall family income. Although differences in family structure make a significant contribution to the black-white family income gap, I would not say it is the most important factor for two reasons. First of all, the proportion of single parent families, specifically female headed families is growing among whites as well, although not at as fast a rate as in the black population. Second, even there were no differences between black and white family structures, the family income gap would still exist, due to labor market inequalities between black and white men and women.
BIBLIOGRAPHY


Bane, Mary Jo, "Household Composition and Poverty", in Danziger and Weinberg, Fighting Poverty, 1986.


Noyelle, Thierry, "Work In a World of High Technology: Employment Problems and Mobility Prospects for Disadvantaged Workers". Mimeo, prepared for the Office of Research in High Technology and Education at the University of Tennessee at Knoxville. (1984)


Smith James P. and Finis Welch, Closing the Gap: 40 Years of Black Economic Progress, Rand Corporation, Santa Monica, California, 1986.


Wilson, William Julius, The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy, University of Chicago Press, 1987
APPENDIX 1

1. The following is a justification for the equation used to decompose family income, from Cordelia Reimers (1984):

"If $E_{ijk} = \text{earnings of member in family } k \text{ and in role } j \text{ in group } i$, $n_k = \text{total numbers of families in group } i$, $n_{ij} = \text{number of families in group } i \text{ with a member in role } j \text{ and } n_{ij} = \text{number of families in group } i \text{ with } E_{ijk} \neq 0$ then,

$$\bar{E}_{ij} = (n_{ij}/n_i)(n'_{ij}/n_{ij}) \left( \sum_k E_{ijk}/n'_j \right)$$

Finally, each ratio can be approximated by the product of the ratio of the means of the factors of $E_{ijk}$; that is, if $E_{ijk} = A_{ijk}B_{ijk}C_{ijk}$, then $\bar{E}_{ij}/\bar{E}_{aj} \approx (\bar{A}_{ij}/\bar{A}_{aj})(\bar{B}_{ij}/\bar{B}_{aj})(\bar{C}_{ij}/\bar{C}_{aj})$.

In general, if $Z = \pi_{-1}A_i$, then

$$E(\ln Z) = \sum_i \bar{E}(\ln A_i),$$

where $E$ is the expectation operator. For any $X$, we can approximate $\ln X$ by a Taylor expansion series around $E(X)$:

$$\ln X \approx \ln [E(X)] + [X-E(X)]/E(X) - (1/2)[X-E(X)]^2/[E(X)]^2.$$  

Taking the expectation on both sides, we have,

$$E(\ln X) \approx \ln [E(X)] - 1/2 \text{ var}(X)/[E(X)]^2.$$  

(2)

With (2) to approximate each side of equation (1) and rearranging,

$$\ln [E(Z)] \approx \sum_i \ln [E(A_i)] + (1/2)\{\text{var}(Z)/[E(Z)]^2 - \sum_i \text{var}(A_i)/[E(A_i)]^2\};$$

so

$$\ln [E(Z_1)/E(Z_2)] \approx \sum_i \ln [E(A_{i1})/E(A_{i2})] + (1/2)\{\text{var}(Z_1)/[E(Z_1)]^2 - \text{var}(Z_2)/[E(Z_2)]^2 - \sum_i \text{var}(A_{i1})/[E(A_{i1})]^2 + \sum_i \text{var}(A_{i2})/[E(A_{i2})]^2\}.$$  

With the assumption that the coefficients of variation are similar for groups 1 and 2, the term in curly brackets can be neglected, so that $E(Z_1)/E(Z_2) \approx \pi'_{11}[E(A_{11})/E(A_{12})]$. 
APPENDIX 2

Contains:

- Decompositions for 1979 (Tables Thirteen - Seventeen)

- Percent Change in the Mean Ratios Between 1979 and 1987 (Tables Eleven and Twelve)
<table>
<thead>
<tr>
<th>Source</th>
<th>WHITES</th>
<th>Mean $E or Y from table</th>
<th>Weighted $E amount</th>
<th>Contribution 1979</th>
<th>Contribution 1987</th>
</tr>
</thead>
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<tr>
<td>Total family income</td>
<td>$24,108</td>
<td>31,453</td>
<td>$24,108</td>
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<td>1.000</td>
</tr>
<tr>
<td>Married Couple Families</td>
<td></td>
<td></td>
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<td>Male heads</td>
<td>$14,828</td>
<td>27,210</td>
<td>$17,782</td>
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<td>Female spouses</td>
<td>$3,717</td>
<td>27,210</td>
<td>$6,734</td>
<td>15,136</td>
<td>0.401</td>
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<td>Single headed families</td>
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<tr>
<td>Female heads</td>
<td>$5,473</td>
<td>3,426</td>
<td>$8,403</td>
<td>2,235</td>
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<tr>
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<td>$11,627</td>
<td>817</td>
<td>$15,504</td>
<td>599</td>
<td>0.019</td>
</tr>
<tr>
<td>Other family members</td>
<td>$2,444</td>
<td>31,453</td>
<td>$4,385</td>
<td>22,963</td>
<td>0.720</td>
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<tr>
<td>Non-labor income</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Transfers</td>
<td>$607</td>
<td>31,453</td>
<td>$2,661</td>
<td>12,306</td>
<td>0.391</td>
</tr>
<tr>
<td>Non-transfers</td>
<td>$2,280</td>
<td>31,453</td>
<td>$5,982</td>
<td>27,588</td>
<td>0.877</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>BLACKS</th>
<th>Mean $E or Y from table</th>
<th>Weighted $E amount</th>
<th>Contribution 1979</th>
<th>Contribution 1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total family income</td>
<td>$16,159</td>
<td>3,771</td>
<td>$16,159</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Married Couple Families</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>$10,139</td>
<td>2,106</td>
<td>$12,754</td>
<td>1,676</td>
<td>0.444</td>
</tr>
<tr>
<td>Females</td>
<td>$4,550</td>
<td>2,106</td>
<td>$7,225</td>
<td>1,327</td>
<td>0.352</td>
</tr>
<tr>
<td>Single headed families</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female heads</td>
<td>$3,986</td>
<td>1,510</td>
<td>$7,048</td>
<td>854</td>
<td>0.226</td>
</tr>
<tr>
<td>Male heads</td>
<td>$7,949</td>
<td>155</td>
<td>$11,304</td>
<td>109</td>
<td>0.029</td>
</tr>
<tr>
<td>Other family members</td>
<td>$1,577</td>
<td>3,771</td>
<td>$4,095</td>
<td>2,515</td>
<td>0.667</td>
</tr>
<tr>
<td>Non-labor income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfers</td>
<td>$713</td>
<td>3,771</td>
<td>$2,555</td>
<td>2,000</td>
<td>0.552</td>
</tr>
<tr>
<td>Non-transfers</td>
<td>$1,236</td>
<td>3,771</td>
<td>$2,532</td>
<td>2,961</td>
<td>0.785</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>1979 BLK/WHT RATIO OF MEANS</th>
<th>1987 BLK/WHT RATIO OF MEANS</th>
<th>DIFFERENCE IN PERCENT CHANGE</th>
<th>1979 BLK/WHT CONTRIBUTION RATIO</th>
<th>1987 BLK/WHT CONTRIBUTION RATIO</th>
<th>DIFFERENCE</th>
<th>PERCENT CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total family income</td>
<td>0.670</td>
<td>0.649</td>
<td>-0.021</td>
<td>-3.126</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married Couple Families</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male heads</td>
<td>0.441</td>
<td>0.421</td>
<td>-0.020</td>
<td>-4.424</td>
<td>0.658</td>
<td>0.649</td>
<td>-0.009</td>
</tr>
<tr>
<td>Female spouses</td>
<td>0.785</td>
<td>0.718</td>
<td>-0.066</td>
<td>-8.467</td>
<td>1.170</td>
<td>1.106</td>
<td>-0.065</td>
</tr>
<tr>
<td>Single headed families</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male heads</td>
<td>2.673</td>
<td>2.540</td>
<td>-0.133</td>
<td>-4.967</td>
<td>3.988</td>
<td>3.912</td>
<td>-0.076</td>
</tr>
<tr>
<td>Female heads</td>
<td>1.079</td>
<td>1.087</td>
<td>0.008</td>
<td>0.786</td>
<td>1.609</td>
<td>1.674</td>
<td>0.065</td>
</tr>
<tr>
<td>Other family members</td>
<td>0.956</td>
<td>0.958</td>
<td>0.102</td>
<td>11.936</td>
<td>1.277</td>
<td>1.475</td>
<td>0.198</td>
</tr>
<tr>
<td>Non-labor income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfers</td>
<td>1.253</td>
<td>1.081</td>
<td>-0.172</td>
<td>-13.724</td>
<td>1.869</td>
<td>1.665</td>
<td>-0.205</td>
</tr>
<tr>
<td>Non-transfers</td>
<td>0.691</td>
<td>0.511</td>
<td>-0.180</td>
<td>-26.095</td>
<td>1.030</td>
<td>0.786</td>
<td>-0.244</td>
</tr>
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</table>

My computations.
<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean Value For White Husbands</th>
<th>Mean Value For Black Husbands</th>
<th>Black/White Ratio of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings of husbands</td>
<td>$12,854</td>
<td>$5,668</td>
<td>0.441</td>
</tr>
<tr>
<td>Percentage of families with husband present</td>
<td>0.865</td>
<td>0.558</td>
<td>0.645</td>
</tr>
<tr>
<td>Percentage who have earnings</td>
<td>0.836</td>
<td>0.800</td>
<td>0.957</td>
</tr>
<tr>
<td>Earnings of those with earnings = 0</td>
<td>$17,782</td>
<td>$12,754</td>
<td>0.717</td>
</tr>
<tr>
<td>Percent of husbands who are civilians</td>
<td>0.990</td>
<td>0.979</td>
<td>0.989</td>
</tr>
<tr>
<td>Percentage civilians in labor force</td>
<td>0.810</td>
<td>0.766</td>
<td>0.946</td>
</tr>
<tr>
<td>Weeks in labor force of those in labor force</td>
<td>40.42</td>
<td>36.85</td>
<td>0.912</td>
</tr>
<tr>
<td>(Weeks employed)/(weeks in labor force) for those in labor force</td>
<td>0.998</td>
<td>0.994</td>
<td>0.996</td>
</tr>
<tr>
<td>Hours worked per week</td>
<td>44.06</td>
<td>40.9</td>
<td>0.928</td>
</tr>
<tr>
<td>Hourly earnings</td>
<td>8.52</td>
<td>6.87</td>
<td>0.806</td>
</tr>
</tbody>
</table>

TABLE FOURTEEN
DECOMPOSITION OF BLACK WIVES' MEAN EARNINGS CONTRIBUTION
TO TOTAL FAMILY INCOME, 1979

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean Value For White Wives</th>
<th>Mean Value For Black Wives</th>
<th>Black/White Ratio of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings of wives</td>
<td>$3,241</td>
<td>$2,542</td>
<td>0.784</td>
</tr>
<tr>
<td>Percentage of families with wives present</td>
<td>0.865</td>
<td>0.558</td>
<td>0.645</td>
</tr>
<tr>
<td>Percentage who have earnings</td>
<td>0.556</td>
<td>0.630</td>
<td>1.13</td>
</tr>
<tr>
<td>Earnings of those with earnings = 0</td>
<td>$6,734</td>
<td>$7,225</td>
<td>1.07</td>
</tr>
<tr>
<td>Percentage in labor force</td>
<td>0.507</td>
<td>0.581</td>
<td>1.15</td>
</tr>
<tr>
<td>Weeks in labor force of those in labor force</td>
<td>23.46</td>
<td>26.83</td>
<td>1.14</td>
</tr>
<tr>
<td>(Weeks employed)/(weeks in labor force) for those in labor force</td>
<td>0.995</td>
<td>0.983</td>
<td>0.988</td>
</tr>
<tr>
<td>Hours worked per week</td>
<td>33.75</td>
<td>35.40</td>
<td>1.05</td>
</tr>
<tr>
<td>Hourly earnings</td>
<td>4.92</td>
<td>4.46</td>
<td>0.907</td>
</tr>
</tbody>
</table>

TABLE FIFTEEN
DECOMPOSITION OF BLACK SINGLE MOTHERS' MEAN EARNINGS CONTRIBUTION
TO TOTAL FAMILY INCOME, 1979

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean Value For Single White Mothers</th>
<th>Mean Value For Single Black Mothers</th>
<th>Black/White Ratio of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings of single mothers........</td>
<td>$597</td>
<td>$1,596</td>
<td>2.67</td>
</tr>
<tr>
<td>Percent of families with single female head present........</td>
<td>0.109</td>
<td>0.430</td>
<td>3.94</td>
</tr>
<tr>
<td>Percentage of those present who have earnings........</td>
<td>0.652</td>
<td>0.560</td>
<td>0.86</td>
</tr>
<tr>
<td>Earnings of those with earnings = 0..................</td>
<td>$8,403</td>
<td>$7,048</td>
<td>0.839</td>
</tr>
<tr>
<td>Percentage in labor force..................</td>
<td>0.617</td>
<td>0.538</td>
<td>0.872</td>
</tr>
<tr>
<td>Weeks in labor force of those in labor force........</td>
<td>29.05</td>
<td>23.53</td>
<td>0.810</td>
</tr>
<tr>
<td>(Weeks employed)/(weeks in labor force) for those in labor force...............</td>
<td>0.989</td>
<td>0.963</td>
<td>0.973</td>
</tr>
<tr>
<td>Hours worked per week..................</td>
<td>37.03</td>
<td>36.38</td>
<td>0.982</td>
</tr>
<tr>
<td>Hourly earnings........................</td>
<td>4.95</td>
<td>4.40</td>
<td>0.889</td>
</tr>
</tbody>
</table>

My computations.
<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean Value For White Males</th>
<th>Mean Value For Black Males</th>
<th>Black/White Ratio of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings of single males</td>
<td>$303</td>
<td>$327</td>
<td>1.08</td>
</tr>
<tr>
<td>Percentage of families with single male heads present</td>
<td>0.026</td>
<td>0.041</td>
<td>1.58</td>
</tr>
<tr>
<td>Percentage who have earnings</td>
<td>0.733</td>
<td>0.700</td>
<td>0.955</td>
</tr>
<tr>
<td>Earnings of those with earnings = 0</td>
<td>$15,904</td>
<td>$11,304</td>
<td>0.711</td>
</tr>
<tr>
<td>Percent of single male heads who are civilians</td>
<td>0.993</td>
<td>0.994</td>
<td>1.00</td>
</tr>
<tr>
<td>Percentage civilians in labor force</td>
<td>0.720</td>
<td>0.650</td>
<td>0.903</td>
</tr>
<tr>
<td>Weeks in labor force of those in labor force</td>
<td>34.700</td>
<td>30.7</td>
<td>0.885</td>
</tr>
<tr>
<td>(Weeks employed)/(weeks in labor force) for those in labor force</td>
<td>0.993</td>
<td>0.991</td>
<td>0.997</td>
</tr>
<tr>
<td>Hours worked per week</td>
<td>43.20</td>
<td>38.80</td>
<td>0.898</td>
</tr>
<tr>
<td>Hourly earnings</td>
<td>7.74</td>
<td>6.40</td>
<td>0.827</td>
</tr>
</tbody>
</table>


My computations.
<table>
<thead>
<tr>
<th>FACTOR</th>
<th>Mean Value for Whites</th>
<th>Mean Value for Blacks</th>
<th>Black/White Ratio of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings of other family members................</td>
<td>$3,194</td>
<td>$2,733</td>
<td>0.856</td>
</tr>
<tr>
<td>Number of family members 14 or older, per family........</td>
<td>0.58</td>
<td>0.98</td>
<td>1.69</td>
</tr>
<tr>
<td>Percentage of family members 14 or older with earnings........</td>
<td>0.610</td>
<td>0.425</td>
<td>0.697</td>
</tr>
<tr>
<td>Earnings of other family members with earnings = 0........</td>
<td>$4,385</td>
<td>$4,095</td>
<td>0.934</td>
</tr>
</tbody>
</table>