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ABSTRACT

Since 1978, when the Middle Income Student Assistance Act was passed, federal, state, and institutional student financial aid developments have consistently expanded programs, eligibility, and benefits for students from middle and affluent family income backgrounds. Poverty-level students have experienced substantial declines in gift aid and increased use of loans, while students whose family incomes were more than 200% of the poverty threshold reported less use of student loans and greater gift aid. The 1980s also saw growing disparity between college participation rates of students from the bottom and top halves of the family income distribution; this finding holds for males, females, whites, blacks, and Hispanics. States serve as the largest reservoir of middle income and affluent student financial aid, and state appropriations to need-based student aid programs targeted on low-income students constitute less than 6% of state support for higher education. Institutional gift assistance appears to be awarded to students without regard to financial need. The financial aid goal of equalizing higher educational opportunity for the most financially disadvantaged groups has not been achieved, and during the 1980s the higher educational participation of the poor greatly deteriorated relative to that goal and relative to what was accomplished during the 1970s. Includes 20 references. (JDD)

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Thomas G. Mortenson

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THE REALLOCATION OF FINANCIAL AID FROM POOR TO MIDDLE INCOME AND AFFLUENT STUDENTS 1978 TO 1990

Thomas G. Mortenson

SUMMARY

Since 1978, federal, state, and institutional student financial aid developments have consistently expanded programs, eligibility, and benefits for students from middle and affluent family income backgrounds. Moreover, often these enhancements have been financed by shifting money previously designated for low income students to these higher family income students. This study examines the form, influences, and results of this shift in student financial aid policy between 1978 and 1990.

Beginning with passage of the federal Middle Income Student Assistance Act in 1978, virtually every major change in federal, state, and institutional student aid has worked for the benefit of students from middle and high family income backgrounds:

- Federal aid has shifted from grants to loans.
- Pell Grant formula changes have extended middle income eligibility.
- College savings plans serve those who are able to save.
- New scholarship programs benefit the most affluent.
- Special Congressional Methodology treatments for dislocated workers and displaced homemakers benefit only those who are most affluent.
- The elimination of Social Security survivor's benefits for college hurts mainly low income students.
- During the last five years, state grants to undergraduate students based on need have grown at a lower rate than have grants not based on need.
- State universities have raised their admissions standards, thus excluding the poor disproportionately and preserving large institutional subsidies for middle income and affluent students.
- State pre-paid tuition and savings plans benefit only those who have the discretionary income to save for college and plans to do so.
- The growth in institutionally funded scholarship programs since 1980 has gone primarily to middle income and affluent students.

The distribution of financial aid to college freshmen reflects the above developments. During the 1980s, students from poverty family income levels experienced substantial declines in gift aid and increased use of loans. On the other hand, students whose family incomes were more than 200 percent of the poverty threshold reported less use of student loans and greater gift aid.

The shifting emphasis of student financial aid has occurred at the same time that substantial shifts have occurred in higher educational participation by students from different family income levels. Current Population Survey data on the college participation rates of unmarried 18 to 24 year olds between 1970 and 1988 by family income quartiles show great and growing disparity between the college participation rates of students from the bottom and top halves of the family income distribution. This disparity, greatest between the bottom quartile students and those from the top half of the family income distribution, closed somewhat between 1970 and 1980 but has widened steadily and significantly since then through 1988. This finding holds for males, females, whites, blacks, and Hispanics.

The shifting focus of student financial aid is not isolated. It is the result of decisions by policy makers at the federal, state, and institutional levels. At the federal level, the shifting focus appears to be a response to the plight of

Americans who have poorly prepared their finances to meet the costs of sending children to college. The savings rate for Americans reached an all-time low in 1987 and has recovered only slightly since then. Consumer installment debt as a proportion of disposable personal income is now (1989) at an all-time high, as is mortgage debt. Americans have been spending money faster than they have been earning it since the end of World War II. As a result, when their children reach college age, they are poorly prepared to absorb a large increase in expenses. Federal policy makers appear to have responded to their requests for help through a wide variety of existing program changes and new program initiatives. This refocusing has left programs originally focused on the poor inadequate to meet the needs of this group for assistance.

States remain the largest reservoir of middle income and affluent student financial aid. State appropriations to need-based student aid programs targeted on low income students constitute less than six percent of state support for higher education. Tuition and fees collected from students cover only about one-fifth of educational and general expenditures of institutions of higher education in the United States--a proportion that has not changed appreciably in several decades. The remaining four-fifths are covered by other institutional revenues, mainly state appropriations. These appropriations are allocated across students without regard to financial need; in fact, according to the National Postsecondary Student Aid Study (NPSAS), 58 percent of all undergraduates attend public institutions without further financial aid of any sort. Many of these students need no public subsidy at all to attend higher education.

The fastest growing source of financial aid for students (except for federal educational loans) is institutional gift assistance. In some states this source may surpass either federal or state gift aid programs. Institutional aid, however, appears to be awarded to students without regard to financial need. In the New York NPSAS study, for example, 60 percent of those who received federal Pell Grants came from families earning less than $20,000 per year, compared to 24 percent of those who received institutional grants or scholarships. In contrast, just 9 percent of the federal Pell Grant recipients were awarded to students whose parents earned more than $40,000 per year, compared to 48 percent of the institutionally awarded grants and scholarships. Indeed, institutional financial aid has grown remarkably during the 1980s--to the benefit of affluent students.

The refocusing of student financial aid programs from poor to middle income and affluent students has clearly benefited the latter, whose participation rates in higher education are at all-time highs. For students from the bottom quartile of the family income distribution, college participation rates have dropped and the difference from the rates for students from the top half of the family income distribution is greater now than at any time in the last two decades. The financial aid goal of equalizing higher educational opportunity for the most financially disadvantaged groups has not been achieved, and in fact during the 1980s the higher educational participation of the poor has greatly deteriorated relative to that goal and to what was accomplished during the 1970s.

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Thomas G. Mortenson
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I. Introduction

The Issue

The reallocation of student financial aid from poor to middle income and affluent students has been the most pervasive, persistent, and least discussed trend in student aid policy during the last dozen years. Beginning with passage of the federal Middle Income Student Assistance Act in 1978, virtually every major change in federal, state, and institutional student aid has worked for the benefit of middle income and affluent students.

- Federal aid has shifted from grants to loans.
- Pell Grant formula changes have extended middle income eligibility.
- College savings plans serve those who are able to save.
- New scholarship programs benefit the most affluent.
- Special Congressional Methodology treatments for dislocated workers and displaced homemakers benefit only those who are most affluent.
- The elimination of Social Security survivor's benefits for college hurt mainly low income students.
- Many states have created scholarship programs that benefit the least needy.
- State universities have raised their admissions standards, excluding the poor disproportionately, and preserving large state subsidies for middle income and affluent students.
- State pre-paid tuition and savings plans benefit only those who have the discretionary income to save for college and plans to do so.
- The growth in institutionally funded scholarship programs since 1980 has gone primarily to middle income and affluent students.

Moreover, under the constraint of limited budgetary resources during the 1980s, many of these changes have been financed by shifting money from the poor students for which they were originally intended to fund the expanded eligibility for middle income and affluent students.

The changes in federal and state aid programs to assist students from middle income backgrounds are the result of political pressures to meet their financing needs. Middle income and affluent families are more active in the political system than are the poor, and elected representatives reflect the concerns of those who gave them their jobs. Institutions allocate their own financial aid resources to maximize institutional self-interest. Neither reflects particularly well the original objective of need-based student financial aid as it was conceived in the 1965 Higher Education Act and in the subsequent landmark 1972 Education Amendments.

This paper describes the changes in federal, state, and institutional financial aid programs and policies that have refocused financial aid programs created

in the design of student aid programs, who benefits from these changes, and who loses. This paper then describes the consequences for poor students in terms of higher educational opportunity as measured by higher education participation. Finally, this paper considers the political and organizational motivations for these changes.

Ultimately, we are left with one question:

> **Are we satisfied with the direction and consequences of the federal, state, and institutional financial aid policies that have been pursued since 1978?**

Changes in Student Aid

During the 1980s, college freshmen from different income backgrounds experienced changes in the kinds of student financial aid packages they have received to attend college. The poorest of students--from families whose incomes place them below the federal poverty threshold--have lost considerable grant assistance and aid from their families, and have had to rely increasingly on loans to make up the difference. Students from families whose incomes are more than 200 percent of the poverty threshold have had the opposite experience. These students are more likely to receive gift assistance and less likely to use loans to finance their higher educations. Because this finding is so striking, unreported, and challenging to our concept of the purpose of financial aid to help the needy, we will describe it in more detail before we proceed to the body of this paper.

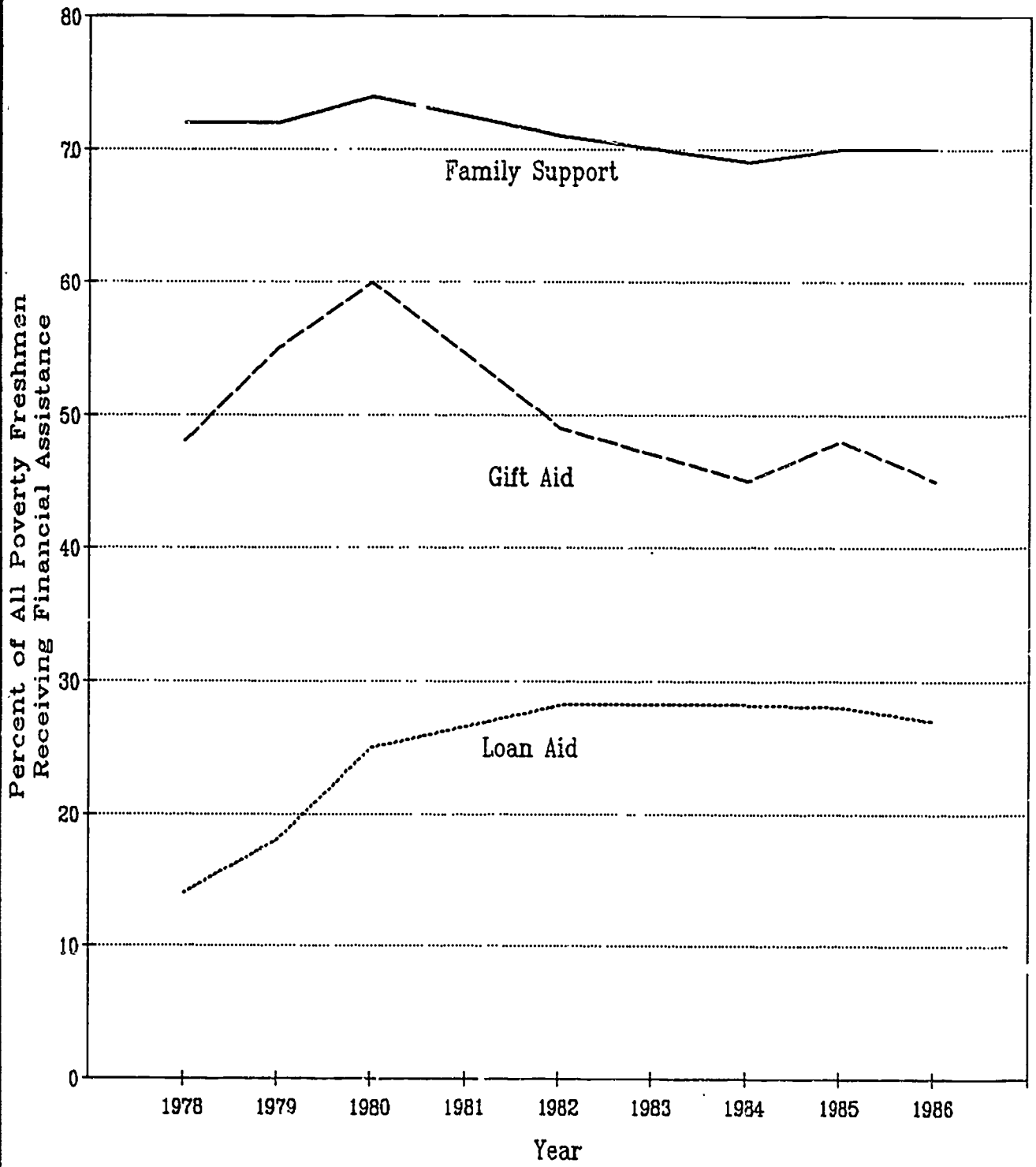
In this analysis, we use the National College Freshmen Norms data collected annually by UCLA and published jointly with the American Council on Education. These data are limited to first-time, full-time college freshmen. Our analysis of these data is limited to the proportion of freshmen receiving aid of each type, at three income levels, over the period between 1978 and 1986. Unfortunately, the nature of the Norms data does not permit us to examine with any accuracy amounts of aid received by type.

Poverty income freshmen. Figure 1 shows the proportion of American college freshmen from families whose incomes and sizes place them below the federal poverty level that received financial assistance from their families (including their own earnings and savings), gift aid, and/or loan aid, between 1978 and 1986. Family support declined slightly during this period, especially after 1980, a decline caused by a reduction in parental support.

Note that under either the Pell or Congressional system of need analysis, students from families living at or below the poverty level are not expected to receive any help from their parents. Parental income up to the poverty level (Pell) or BLS lower standard budget (Congress) is protected from any assessment toward financing college attendance costs. Despite this expectation of no contribution, about half of all college freshmen from poverty income backgrounds report receiving financial support from their parents between 1978 and 1986.

The major changes are in gift and loan financial aid support. The proportion of college freshmen from poverty backgrounds that reported receiving gift aid declined from 60 percent in 1980 to 45 percent in 1984 and again in 1986. This finding is particularly striking given that all full-time college freshmen from

FIGURE 1
FINANCIAL AID BY SOURCE/TYPE
FOR COLLEGE FRESHMEN FROM POVERTY INCOME FAMILIES
1978 TO 1986



Source: National College Freshmen Norms.

poverty backgrounds should qualify for maximum allowable Pell Grants. But in fact, the decline reported above is entirely attributable to the loss of Pell Grants for college freshmen. Between 1980 and 1986, the proportion of poverty freshmen reporting Pell Grants declined from 48 to 34 percent of all freshmen—a 15 percent decline. Poverty background freshmen also reported a 6 percent decline in SEOG support, a 6 percent decline in state scholarship/grant support, and a 2 percent decline in private grant support. College grants increased by 2 percent for this group between 1980 and 1986.

Modest income freshmen. "Modest" family income ranges from the federal poverty level to twice that level. The proportion of college freshmen from modest family income backgrounds who received financial assistance from families, gift aid, and loans is shown in Figure 2.

Between 1980 and 1986, the proportion of college freshmen from modest family income backgrounds reporting aid from their families (including their own earnings and savings) held nearly constant at around 88 percent (compared to about 70 percent of those from poverty income backgrounds). About 70 percent reported parental aid, 57 percent own savings, and 50 percent earnings from employment.

Freshmen from modest income backgrounds, like their fellow freshmen from poverty backgrounds, reported declining gift aid and increased use of loans to finance their collegiate educations. Between 1980 and 1986, the proportion reporting gift aid declined from 63 to 55 percent, Pell Grants declined by 16 percent, SEOGs by 2 percent, state scholarships/grants by 5 percent, and other private grants by 2 percent. The proportion of these freshmen reporting a college grant increased by 7 percent between 1980 and 1986.

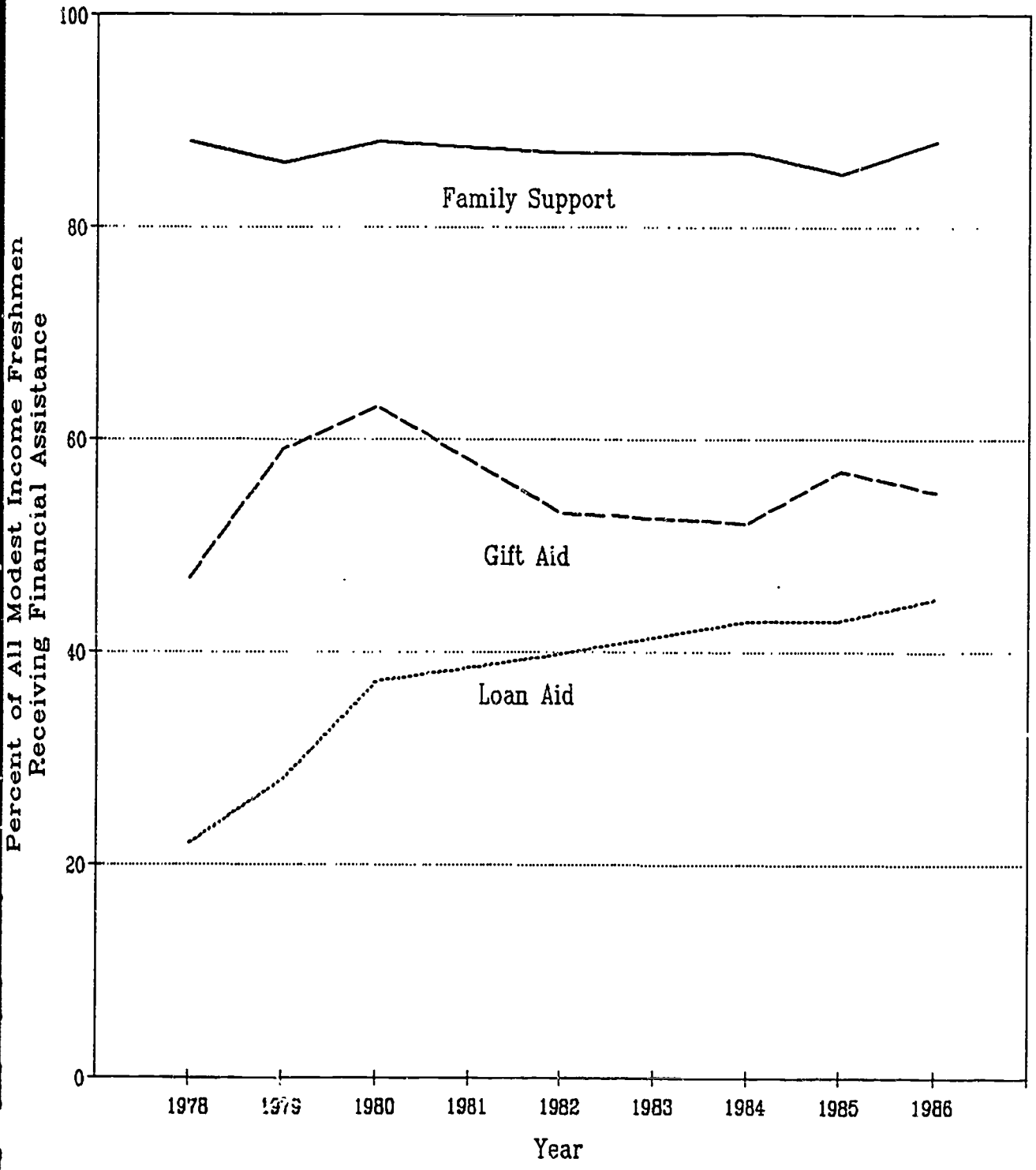
Loan use among freshmen from modest family income backgrounds increased steadily between 1978 and 1986, from 22 to 45 percent. Nearly all of this growth occurred in the Guaranteed Student Loan Program (now Stafford Loan Program), where program participation increased from 9 percent in 1978 to 36 percent by 1986.

Affluent income freshmen. In this paper, family incomes of more than 200 percent of the federal poverty threshold mean "affluent." Freshmen from these families have reported increased grant assistance and decreased loan use in the National College Freshmen Norms.

Grant assistance to affluent families increased from 23 percent in 1978 to 32 percent by 1980, and remained at about that level through 1986. However, this masks important shifts in the sources of grant assistance to affluent students. Federal assistance in the Pell and SEOG programs declined between 1980 and 1986, by 5 percent in the Pell program and 1 percent in the SEOG program. State assistance through grants and scholarships held constant. College grants doubled between 1978 and 1986, from 8 to 16 percent of affluent freshmen.

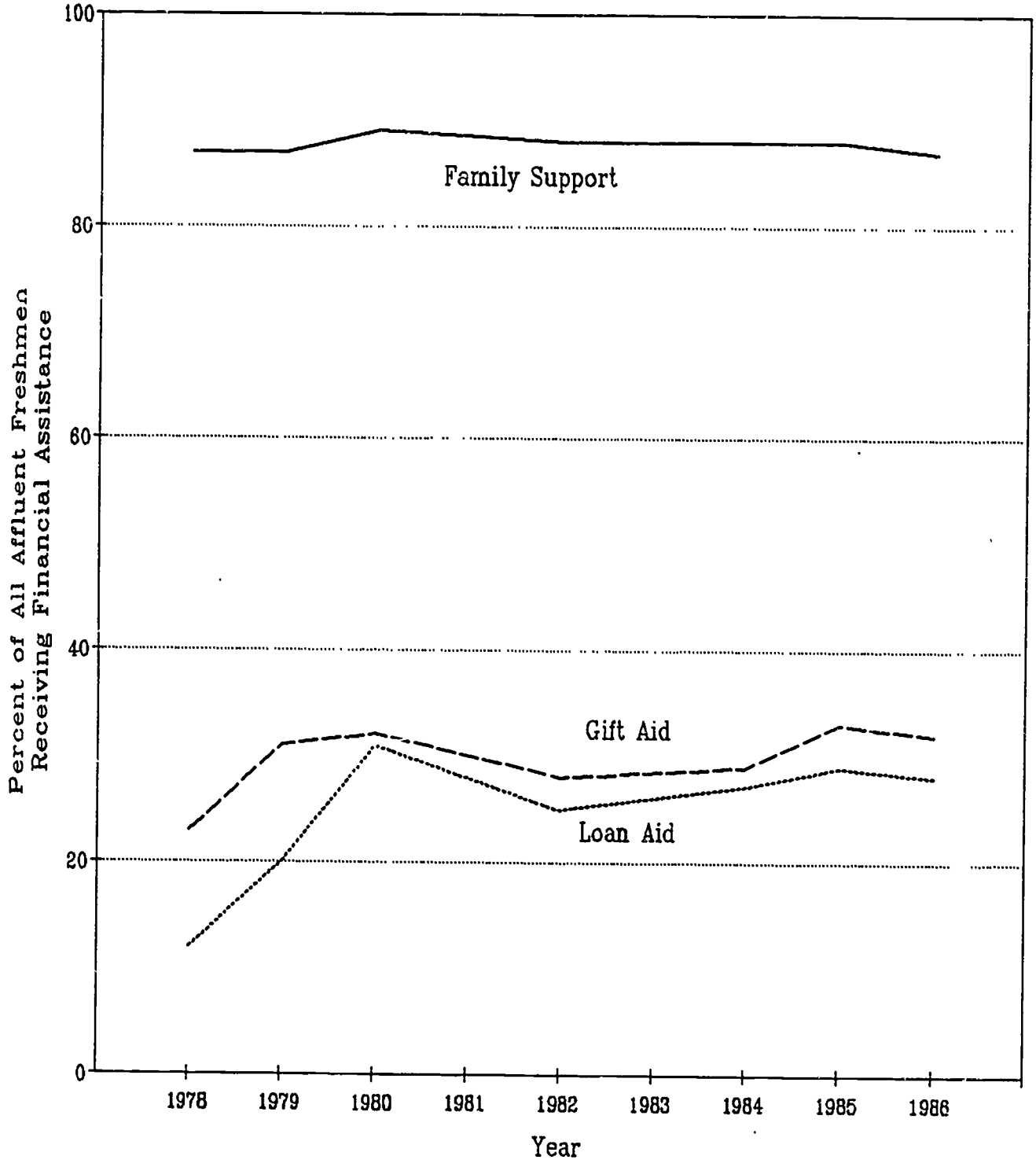
At the same time that gift aid to affluent freshmen was increasing, loan use was decreasing. Between 1978 and 1980, the proportion of affluent freshmen who reported receiving loans increased from 12 to 31 percent when income gaps were removed by the 1978 Middle Income Student Assistance Act. When these caps

FIGURE 2
FINANCIAL AID BY SOURCE/TYPE
FOR COLLEGE FRESHMEN FROM MODEST INCOME FAMILIES
1978 TO 1986



Source: National College Freshmen Norms.

FIGURE 3
FINANCIAL AID BY SOURCE/TYPE
FOR COLLEGE FRESHMEN FROM AFFLUENT FAMILIES
1978 TO 1986



Source: National College Freshmen Norms.

were later reimposed, the proportion of affluent freshmen reporting loans dropped back to 28 percent by 1986. Nearly all of these fluctuations are accounted for in one program: federally Guaranteed Student Loans, now called Stafford Student Loans.

The general patterns in the redistribution of gift and loan aid for college students are clear in the following findings from the National College Freshmen Norms data:

- The greatest cutback in grants received was for the lowest income group of freshmen—those from below the federal poverty line. The proportion of the most affluent freshmen receiving gift aid actually increased.

- The greatest increase in loan use was by modest income freshmen. Freshmen from affluent families actually reduced their use of loans between 1980 and 1986.

Thus, during the 1980s, gift aid has been reallocated from the poor to the affluent, and loan aid has been reallocated from the affluent to those of modest income background.

II. The Shifting Focus of Student Aid

Financial aid is funded from four sources: federal and state governments, institutions, and private sources. In this section we will examine changes in federal, state, and institutional student financial aid programs over the last decade and a half. Table 1 on the following page provides an overview of financial aid to college freshmen. It shows the proportion of college freshmen reporting receiving assistance from different sources and programs between 1974 and 1989. However, not all students experienced these trends. Students from different family income backgrounds were affected differently by the shifting focus of student financial aid over the last fifteen years.

Federal Student Aid Changes

About two-thirds of the dollars received by students under what is normally termed student financial aid is awarded through federal student aid programs. These funds come through a variety of programs, in many forms, and are awarded under different eligibility criteria, through different formulas, with different effects on student enrollment behavior. In this section, we explore the major changes in federal student financial aid programs beginning in 1978--who benefited from these changes and who lost.

The shift from gift aid to loans. In 1975, 76 percent of all federal aid was in the form of gifts such as grants, scholarships, and benefits. By 1988 the share of federal aid that was gift aid had dropped to 30 percent. Concommitantly, in 1975, 21 percent of all federal aid was in the form of loans. By 1988 the loan share of the total was 66 percent. This shift was largely the result of reduction or elimination in gift assistance programs such as Social Security survivor benefits and Veterans' benefits, and the expansion of federally guaranteed education loans made to students by private lenders.

Others have documented the federal shift from grants to loans (College Board, 1989). Here, we will describe its meaning in terms of the goal of student financial aid to enhance higher educational opportunity for those with financial need.

Student loans that must be repaid, along with fees and interest after leaving college, pose special problems for low income students when loans are substituted for grants. If grants remove financial barriers to college attendance, then loans not only reintroduce the barrier by requiring the student to repay the student aid after leaving school, but add two additional costs to college attendance for those who use loans to finance college educations. One kind of cost is financing, which includes origination and insurance fees, plus interest on the unpaid balance. Another kind of cost is risk, which is a special burden for low income students because they are often less well prepared academically to succeed in college than their more affluent peers. Financing and risk costs are unique to student loans, and the greater the use of loans the greater these burdens become to those who use them.

We have examined the question of the likely effect of financing and risk costs on the enrollment decisions of students in separate papers (Mortenson, 1988, 1989b, 1990). Both economic theory and attitudinal surveys indicate that

TABLE 1
Percent of First Time, Full Time American College Freshmen
Receiving Financial Aid by Source of Funds
1974-1989

Source of Funds	Entering College Fall Term of: 1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Student and Family																
Parents	80.4	79.8	69.2	79.8	71.8	67.9	68.8	69.2	71.8	70.8	69.8	70.3	73.4	76.5	78.2	79.8
Summer Savings	56.6	52.7	39.7	55.8	47.1	43.0	43.1	43.5	41.3	40.5	45.5	48.4	50.1	54.9	54.4	54.3
Part Time Employment	70.0	64.0	49.5	68.4	24.9	24.3	24.8	23.6	23.7	23.7	28.0	30.8	33.3			
On Campus														18.5	19.4	19.8
Off Campus														24.1	23.3	24.3
Other Savings			20.5	17.9	18.6	19.0	18.5	18.4	19.1	22.1	26.0	28.4	28.6	28.6		
Full Time Employment	11.4	8.7	6.0	9.5	2.1	2.2	2.3	2.0	1.9	1.8	1.7	2.2	2.4	1.9	2.1	2.0
Spouse	2.0	1.6	1.1	1.5	.9	.8	.9	.9	.8	.9	.9	.9	1.4	1.1	1.2	1.1
Federal Programs																
Guaranteed Loan	10.0	9.5	6.8	13.1	10.4	13.2	20.9	26.3	20.8	21.8	23.4	23.0	25.4	22.0	20.1	22.7
Pell Grant	25.0	26.6	21.1	32.7	21.7	31.5	31.5	26.0	23.2	26.5	19.8	19.1	16.9	17.5	15.6	21.6
College Work-Study	12.5	12.2	9.3	15.9	11.2	11.7	14.5	12.0	11.0	13.4	9.4	10.0	10.4	9.8	6.6	10.1
NDSL	9.1	9.6	6.8	10.7	8.0	7.8	9.1	7.6	6.2	6.8	6.2	5.7	6.2	4.5	2.4	4.4
SEOG	6.3	6.3	5.3	9.2	5.7	7.2	8.0	5.7	5.7	6.8	5.4	4.8	5.3	5.8	3.7	6.0
Other Gov. Aid	6.0	5.8	3.7	6.0	3.9	3.7	3.8	3.7	3.0	3.6	2.1	1.8	1.9	1.7	2.4	2.5
Personal G.I. Bill	2.0	2.1	1.1	1.5	.7	.8	.9	.7	.6	.5	.5	.6	.7	---	---	---
Parents G.I. Bill	2.2	2.2	1.4	2.0	1.1	1.1	1.1	1.0	.8	.8	.6	.5	.5	---	---	---
Soc. Sec. Benefits	8.6	8.2	6.1	9.2	5.5	5.3	5.7	5.8	3.2	2.1	---	---	---	---	---	---
Institutional Programs																
College Grant			9.3	16.8	12.5	11.3	12.8	11.4	11.9	13.3	16.7	18.5	17.8	12.9	20.0	20.3
College Loan			3.3	5.4	3.6	3.4	4.0	3.7	3.5	3.7	3.5	3.7	4.0	5.3	5.8	7.7
State Programs																
State Grants	18.9	18.3	13.1	21.2	15.2	15.1	16.0	13.8	14.4	15.7	13.6	14.1	13.5	16.1	09.7	15.0
Private Programs																
Private Grant	19.7	18.0	6.4	10.4	7.4	6.8	7.2	6.8	7.3	7.4	6.3	5.6	6.9	9.5	9.1	9.2
Other Loans	6.8	6.1	3.7	6.6	3.7	3.5	4.0	4.2	4.1	4.0	3.8	3.5	4.1	5.0	5.4	6.3

Source: The American Freshman: National Norms for Fall 19XX, CIRP (ACE, UCLA).

substituting loans for grants will reduce higher educational opportunity for poor students. This effect, however, has not been demonstrated for students from middle and affluent family income backgrounds.

Modest and affluent family income students are more likely to be prepared academically for collegiate study than poor students and thus face lower risk costs in using loans to finance their higher educations. As shown in Table 2, the proportion of 1989 high school graduates who took the ACT Assessment and took a complete college preparatory core curriculum in high school increased with family income, from 34 percent of those from families with incomes of less than $6000 per year to about 56 percent of those from families earning $60,000 or more per year. This finding was true for each racial/ethnic group as well although different groups demonstrated considerably different degrees of college preparatory core curriculum completion.

Moreover, controlling for the core/non-core curriculum, the mean ACT Composite score increased with family income. For example, for all students who took the core curriculum, mean ACT Composite test scores increased from 16.7 for those from families with incomes of less than $6000 per year to 22.4 for students from families earning $60,000 or more per year.

More importantly, the expansion of gift aid to middle income students through federal, state, and institutional student aid programs appears to have reduced use of loans. In two Pennsylvania studies covering the 1980s, those with largest GSL cumulative indebtedness were middle income students in the early 1980s (Davis, 1985). By the late 1980s, however, the poorest students had the largest GSL cumulative indebtedness (Greene, 1989).

Significantly, middle income and affluent students have a more favorable attitude toward the use of loans to finance their educational investment (Mortenson, 1988), as shown in Figure 4. To the extent that attitude and behavior are linked, loans are more likely to meet middle income financial aid needs than they are for students from poor family income backgrounds. We may speculate that the poor have had a quite different relationship to loans than have middle income people. But the fact remains--loans are less favorably perceived by the poor than they are by people from middle and affluent family income backgrounds.

Pell Grant formula changes. Beginning in 1978, and continuing in 1986, Congress has altered the Pell Grant formula to expand middle income eligibility for Pell Grants. These changes include adjustments to arcane formula details such as assessment rates against discretionary income, allowances for state taxes, and allowances for multiple family members enrolled in college. What is not arcane is the effect of these changes on Pell Grant eligibility. The maximum income at which an applicant could still qualify for a Pell Grant was increased in 1979-80 as a result of the 1978 Middle Income Student Assistance Act, as shown in Figure 5.

Congress made even greater changes in the 1986 Amendments, which went into effect with the 1988-89 academic year. We can illustrate this with an example of families from different income levels of four members with two children in college in 1987-88 and 1988-89 as shown in Figure 6. If the family earned $8000, changes in the Pell Grant formula would have enabled each child to have received a $90 increase in their Pell Grants between 1987-88 and 1988-89. However, in another family earning $20,000, the Pell Grant for each child would have increased by $300. In a third family earning $32,000, the Pell Grant

TABLE 2

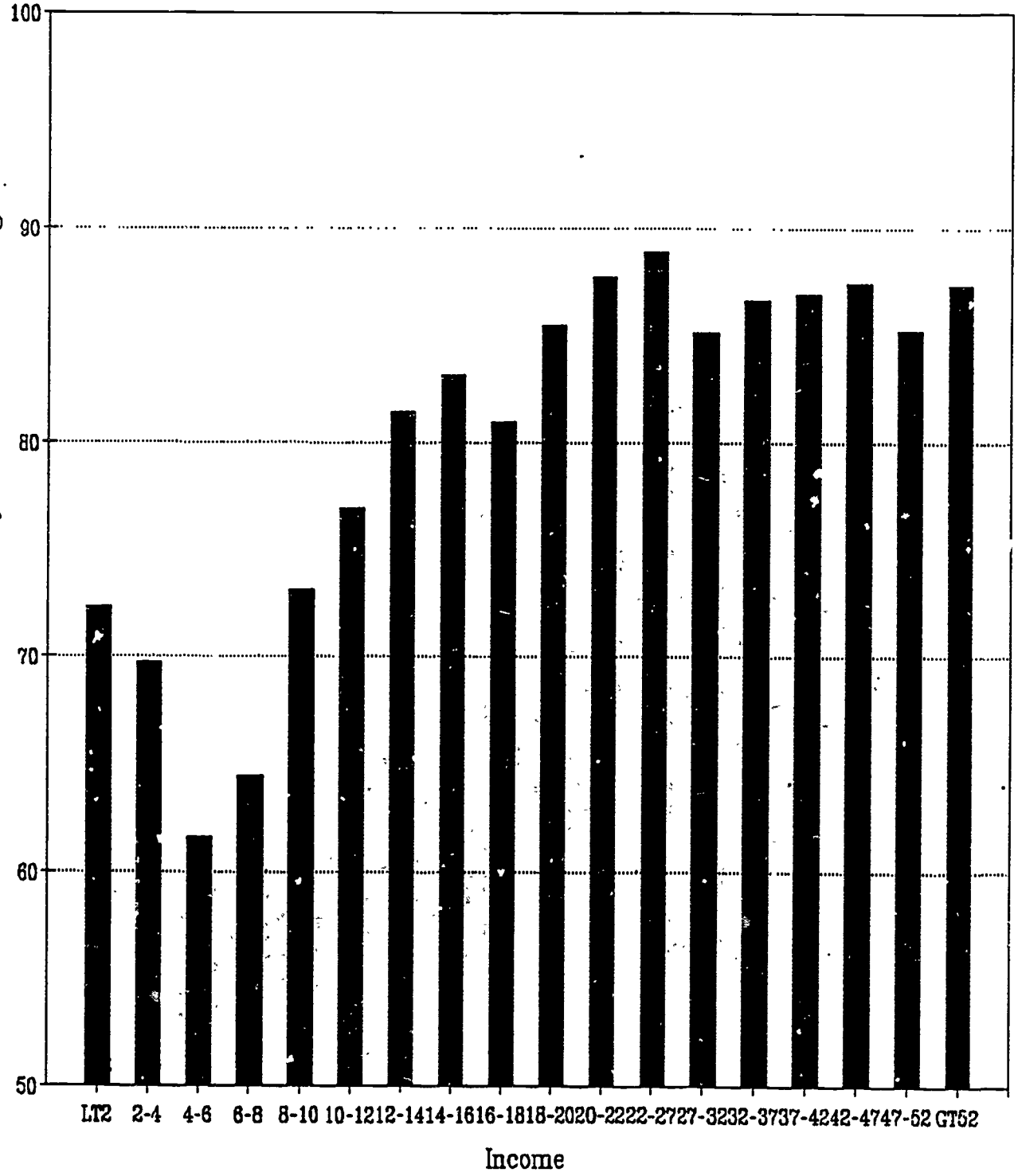
Mean ACT Composite Score
By Family Income, Race/Ethnicity, and High School Core/Non-Core Courses
1989 High School Graduates

	White			Black			Mexican-American			Asian-American			Hispanic			American Indian			All[b]			
Family Income	Core[a]	Non-Core	% Core	Core	Non-Core	% Core	Core	Non-Core	% Core	Core	Non-Core	% Core	Core	Non-Core	% Core	Core	Non-Core	% Core	Combined	Core	Non-Core	% Core
Less Than $6000	19.7	15.4	33.7	13.3	10.7	33.9	15.6	11.6	32.8	16.6	12.9	50.4	15.3	11.4	35.2	14.5	10.8	24.7	14.2	16.7	13.1	34.0
$6000 to $11,999	20.4	16.3	37.4	14.4	11.6	38.6	16.5	12.6	38.9	18.0	14.6	57.3	16.9	13.0	44.2	15.9	12.7	31.0	16.0	18.4	14.7	38.3
$12,000 to $17,999	20.9	16.8	39.8	15.0	12.0	39.7	17.3	13.4	39.4	19.3	16.0	58.1	18.2	13.9	46.4	16.8	12.9	31.8	17.2	19.6	15.7	40.1
$18,000 to $23,999	21.1	17.0	42.3	15.5	12.5	40.7	17.6	13.8	40.4	20.3	16.7	59.8	18.7	14.5	47.0	17.4	13.7	34.3	17.8	20.2	16.2	42.2
$24,000 to $29,999	21.3	17.3	44.4	15.9	12.8	42.8	18.5	14.4	41.4	21.1	18.1	60.2	19.0	15.2	54.1	17.7	14.8	36.0	18.4	20.6	16.7	44.3
$30,000 to $35,999	21.4	17.5	45.8	16.4	13.1	43.3	18.5	15.0	45.4	21.8	18.5	60.6	19.6	15.9	54.0	18.2	14.6	38.3	18.8	20.9	17.0	45.8
$36,000 to $41,999	21.6	17.7	47.6	16.9	13.7	44.5	19.0	15.2	44.0	22.7	19.2	60.7	21.0	16.8	55.9	18.3	14.6	37.7	19.2	21.3	17.4	47.5
$42,000 to $49,999	22.0	18.1	50.1	17.3	13.8	46.1	19.5	15.5	47.0	23.2	19.2	65.6	20.3	16.7	62.6	19.0	15.8	45.8	19.7	21.7	17.8	50.1
$50,000 to $59,999	22.2	18.4	52.2	17.4	14.2	48.1	20.1	16.1	51.8	23.7	20.8	64.8	21.0	17.5	57.0	20.7	15.4	40.3	20.1	22.0	18.1	52.1
$60,000 & Over	22.5	19.0	55.7	18.5	14.7	49.5	20.3	16.8	55.0	24.4	22.2	67.1	21.9	18.9	65.0	19.6	16.1	45.8	20.7	22.4	18.8	55.8
TOTAL	21.6	17.6	46.8	15.5	12.3	40.4	18.0	13.8	41.5	21.6	17.9	60.8	19.3	14.8	51.0	17.6	13.6	34.7	18.6	20.9	16.7	46.1
N	653,330			73,064			21,763			17,171			9,341			8,351			825,812			

[a]High School Core College Preparatory Courses: English: 4 years; Mathematics: 3 years; Social Studies: 3 years; Natural Science: 3 years.
[b]Includes in addition race: Blank, Other, Prefer not to respond.

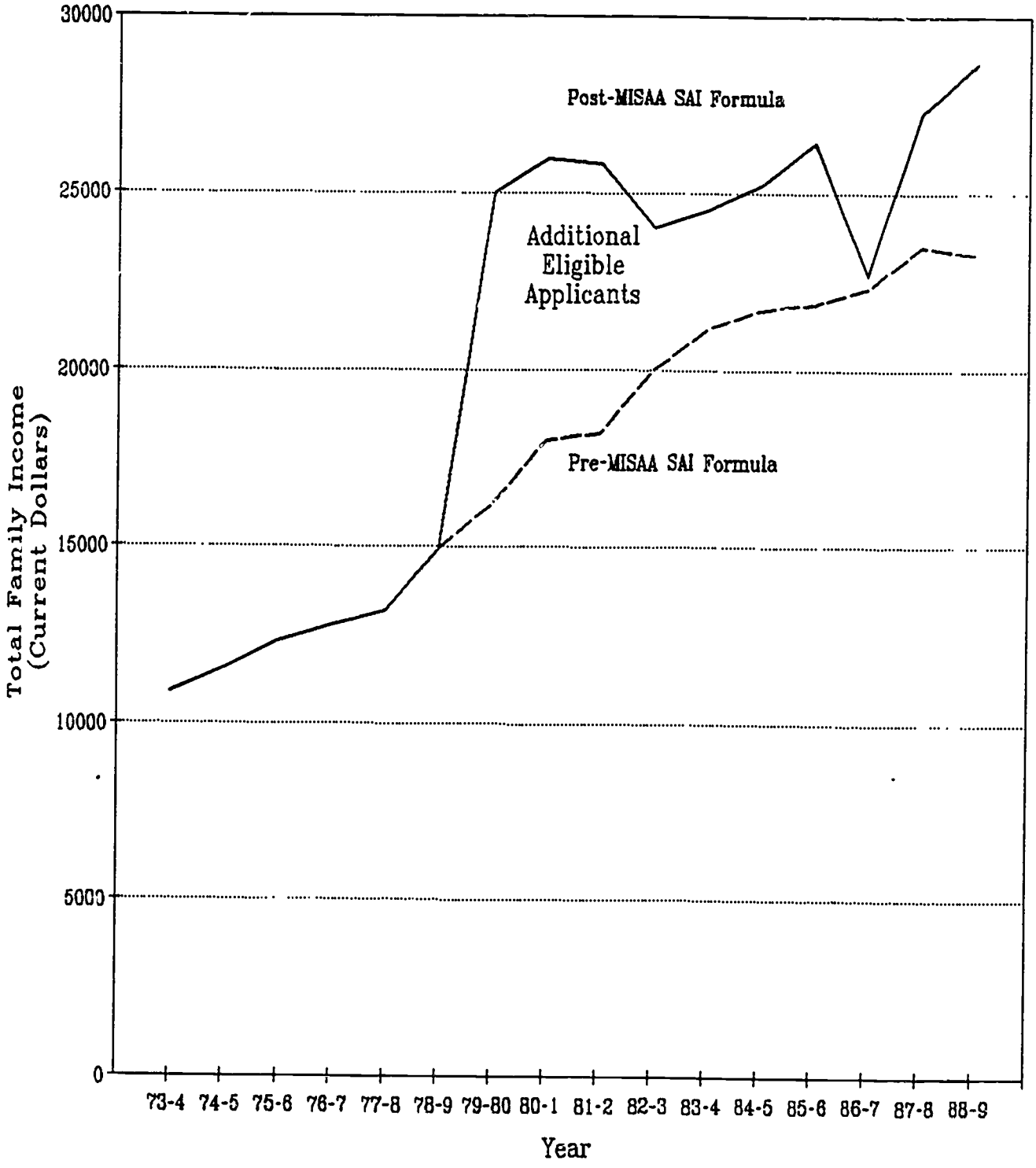
Source: ACT

FIGURE 4
WILLINGNESS TO BORROW FOR EDUCATIONAL EXPENSES BY INCOME 1983



Source: Survey of Consumer Finances, Federal Reserve System

FIGURE 5
MAXIMUM QUALIFYING FAMILY INCOME FOR A MINIMUM PELL GRANT UNDER PRE-MISAA AND POST-MISAA PELL SAI FORMULA 1973-74 TO 1988-89



Family size = 4, 1 in college, no assets.

eligibility for each child would have increased by $850 as shown in Figure 7. The third family, with four times the income of the first, received increases in Pell Grant eligibility nearly ten times that of the lowest income family.

Another illustration of the refocusing of the Pell Grant program is shown in Figures 8 and 9 for a family of two, one of which is a college student and the other a minor child. Between 1987-88 and 1988-89, Pell Grants for those with incomes of $3000 or less increased by $100. However, if the family earned $18,000 per year, the Pell Grant increased by $1350 as a result of changes enacted with the 1986 Amendments. We have summarized the effects of Pell Grant formula changes between 1987-88 and 1988-89 in Table A-1 in the Appendix.

Pell Grant maximum awards--available only to students from poverty level backgrounds--have increased much more slowly than have college attendance costs. Between 1975-76 and 1988-89, the average annual increase in the maximum Pell Grant was $62, compared to average annual increases in the costs of attending a public two-year college of $335, $317 at a public four-year college, and $653 at a private four-year college. One of the major reasons why the Pell Grant maximum award increased so slowly compared to increases in college attendance costs was that funds were diverted from low income Pell applicants to fund the increased eligibility for middle income Pell applicants resulting from Congressional changes in formulas made in 1978 and again in 1986.

Thus, Congressional action has refocused the Pell Grant Program from poor students to middle income students, with the cost of the increased middle income eligibility financed by lowered Pell Grant maximum awards to the poorest aid applicants.

Dislocated workers/displaced homemakers. The 1986 Education Amendments to Title IV of the 1965 Higher Education Act created two new classes of financial aid applicants--dislocated workers and displaced homemakers, and their children when filing as dependents--and provided special formulas that differed from the otherwise standard Congressional Methodology. Congress was apparently concerned that the financial need of students from families that had been disrupted by divorce or unemployment could be adversely impacted in need analysis by the use of family economic data that was no longer applicable, or distorted by adverse circumstance. Thus, the formulas written by Congress into the 1986 Education Amendments provided special treatment of income and home equity for the calculation of expected family contribution.

In ACT's analysis of the beneficiaries of these special formula treatments for dislocated workers and displaced homemakers, a consistent pattern emerged. Those most likely to benefit from the special formula treatments were, on average, more affluent than those who were least likely to benefit. The results of the ACT simulations are summarized in Table 3. In every case, financial aid applicants from families with incomes of 0 to $10,000 were least likely to have their expected family contributions (EFC) reduced by the special formula treatment. Aid applicants with family incomes of more than $20,000 per year were anywhere from four to ten times more likely to have their expected family contributions reduced by the special formula treatments, and hence qualify for more financial aid. The median family income of those whose expected family contributions were reduced by $100 or more through the special formula treatments were usually two to three times higher than those whose expected family contributions were affected by less than $100 (Mortenson, 1989a).

FIGURE 6
PELL GRANT ELIGIBILITY AT PUBLIC FOUR-YEAR COLLEGE
FOR DEPENDENT, FAMILY SIZE OF 4, 2 IN COLLEGE
IN 1987-88 AND 1988-89

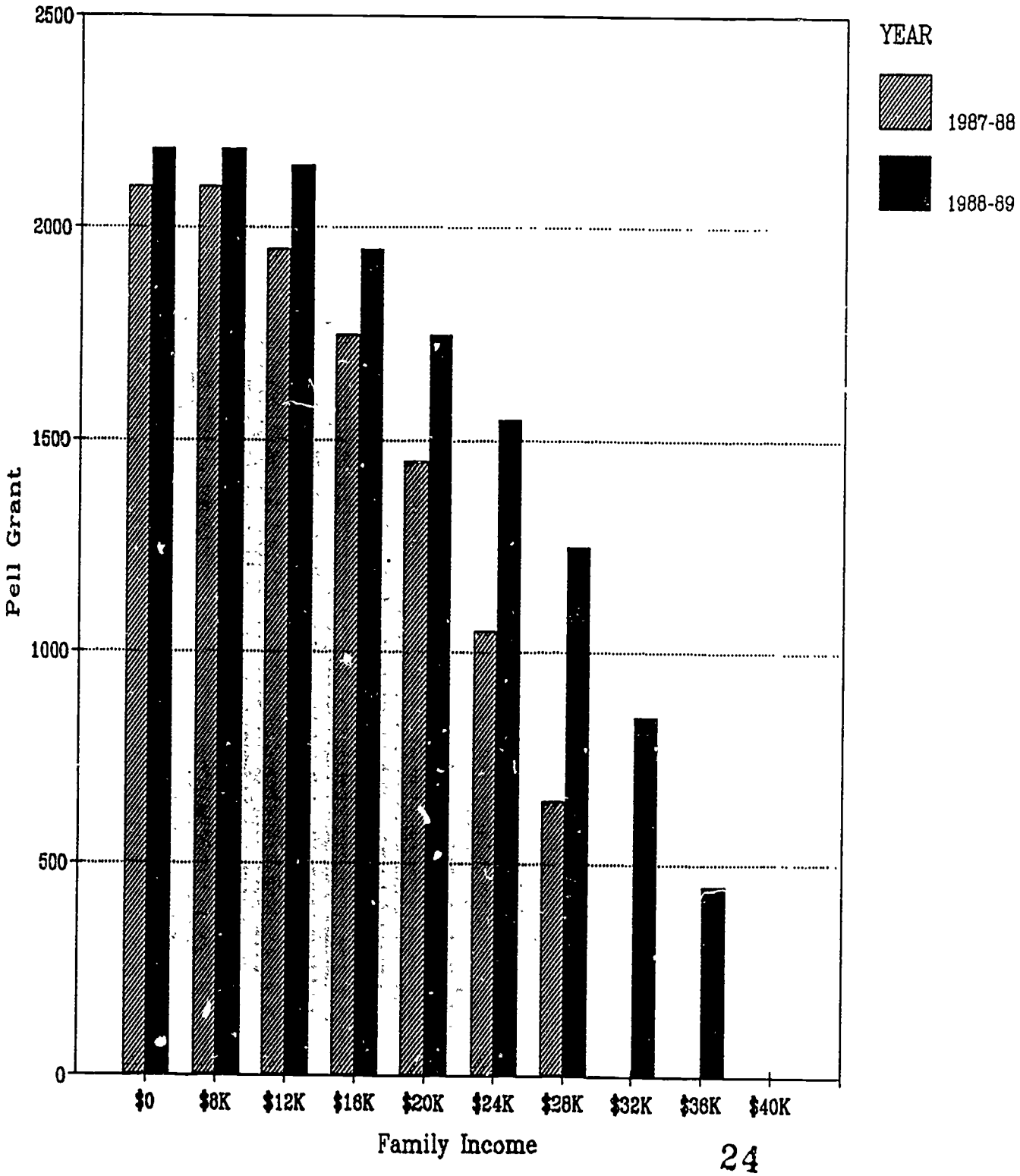


FIGURE 7
CHANGE IN PELL GRANT ELIGIBILITY AT PUBLIC FOUR-YEAR COLLEGE FOR DEPENDENT, FAMILY SIZE OF 4, 2 IN COLLEGE BETWEEN 1987-88 AND 1988-89

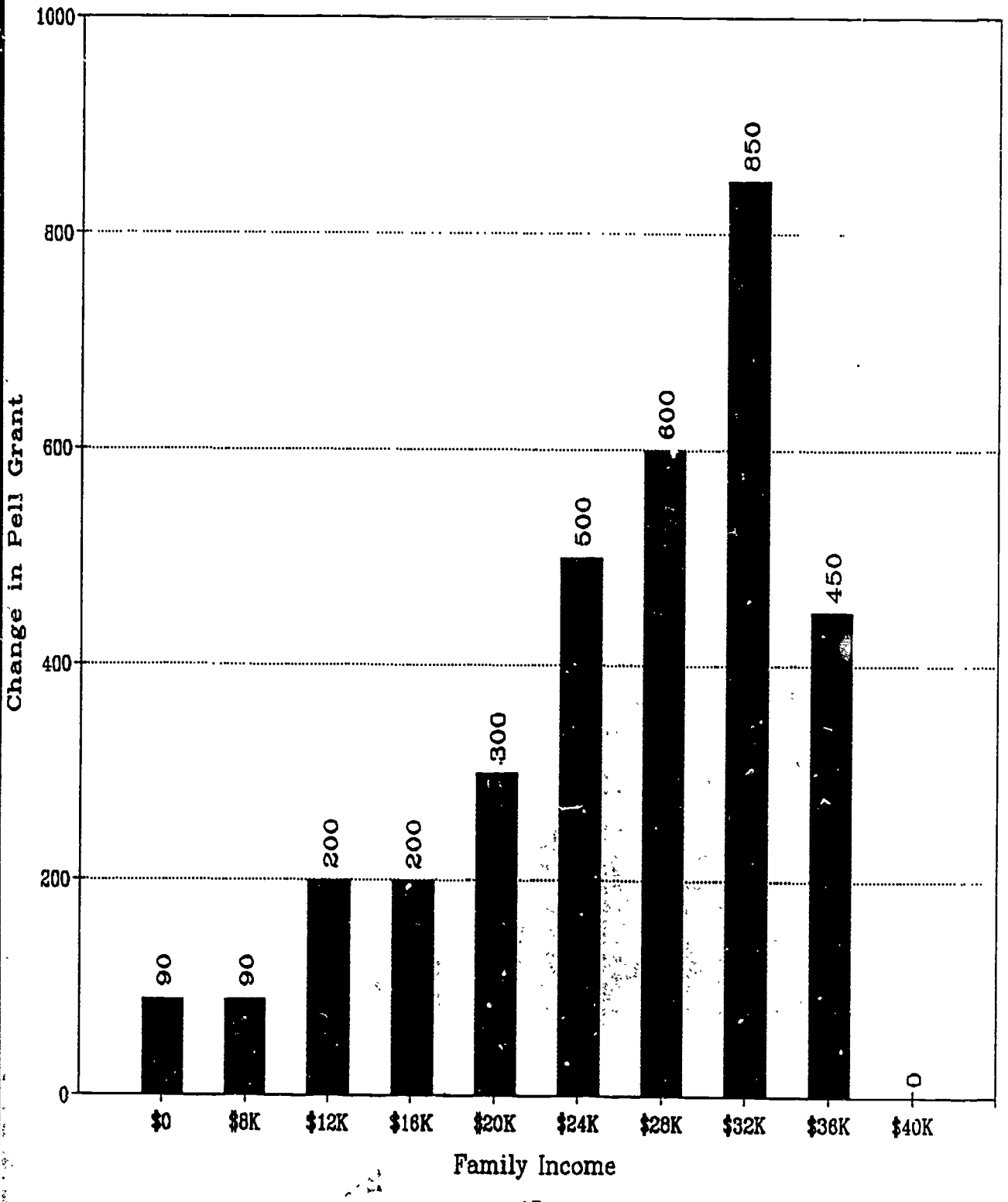


FIGURE 8
PELL GRANT ELIGIBILITY AT PUBLIC FOUR-YEAR COLLEGE
FOR UNMARRIED INDEPENDENT, FAMILY SIZE OF 2, 1 IN COLLEGE
IN 1987-88 AND 1988-89

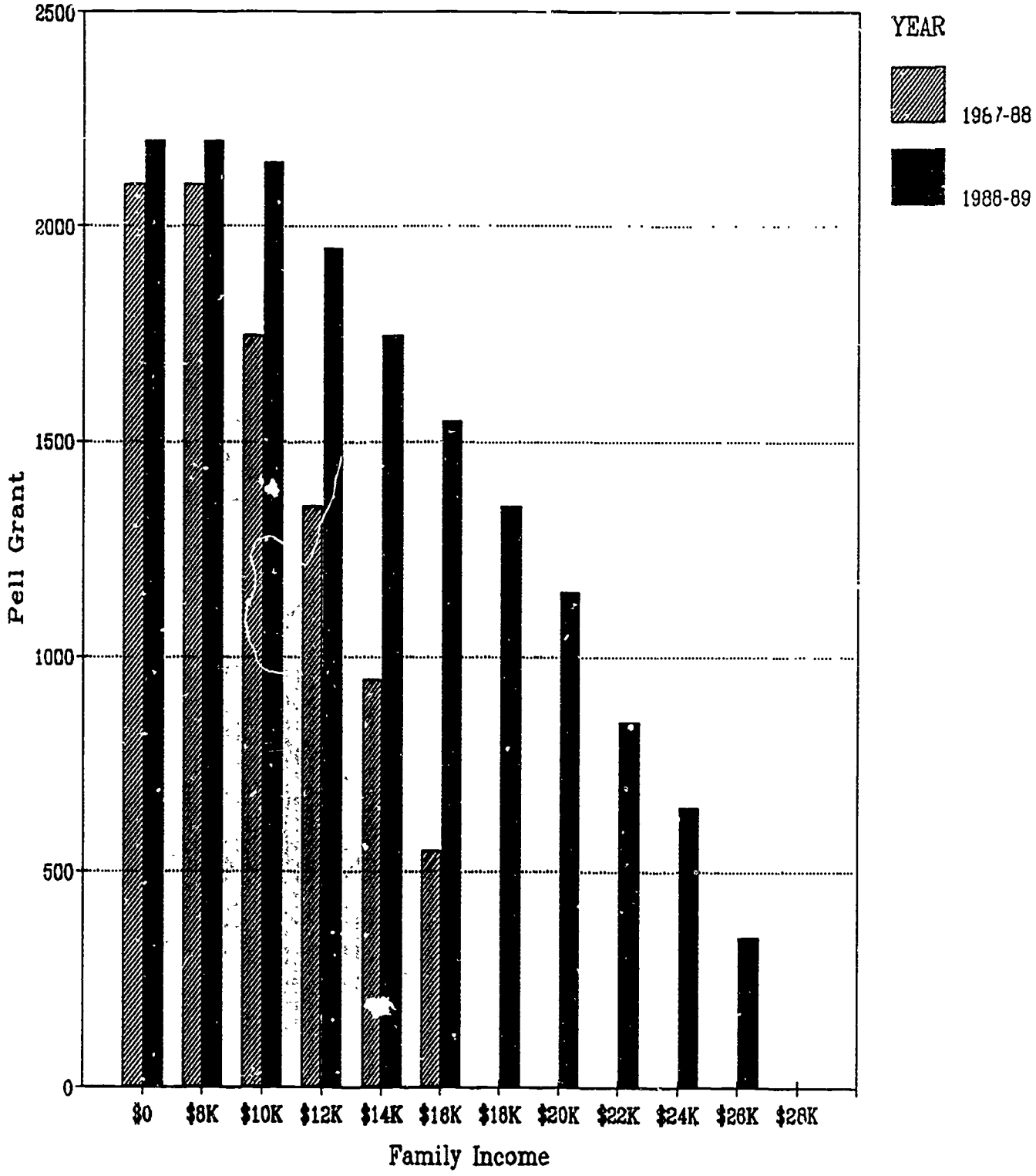


FIGURE 9
CHANGE IN PELL GRANT ELIGIBILITY AT PUBLIC FOUR-YEAR COLLEGE FOR UNMARRIED INDEPENDENT, 1 CHILD, 1 IN COLLEGE BETWEEN 1987-88 AND 1988-89

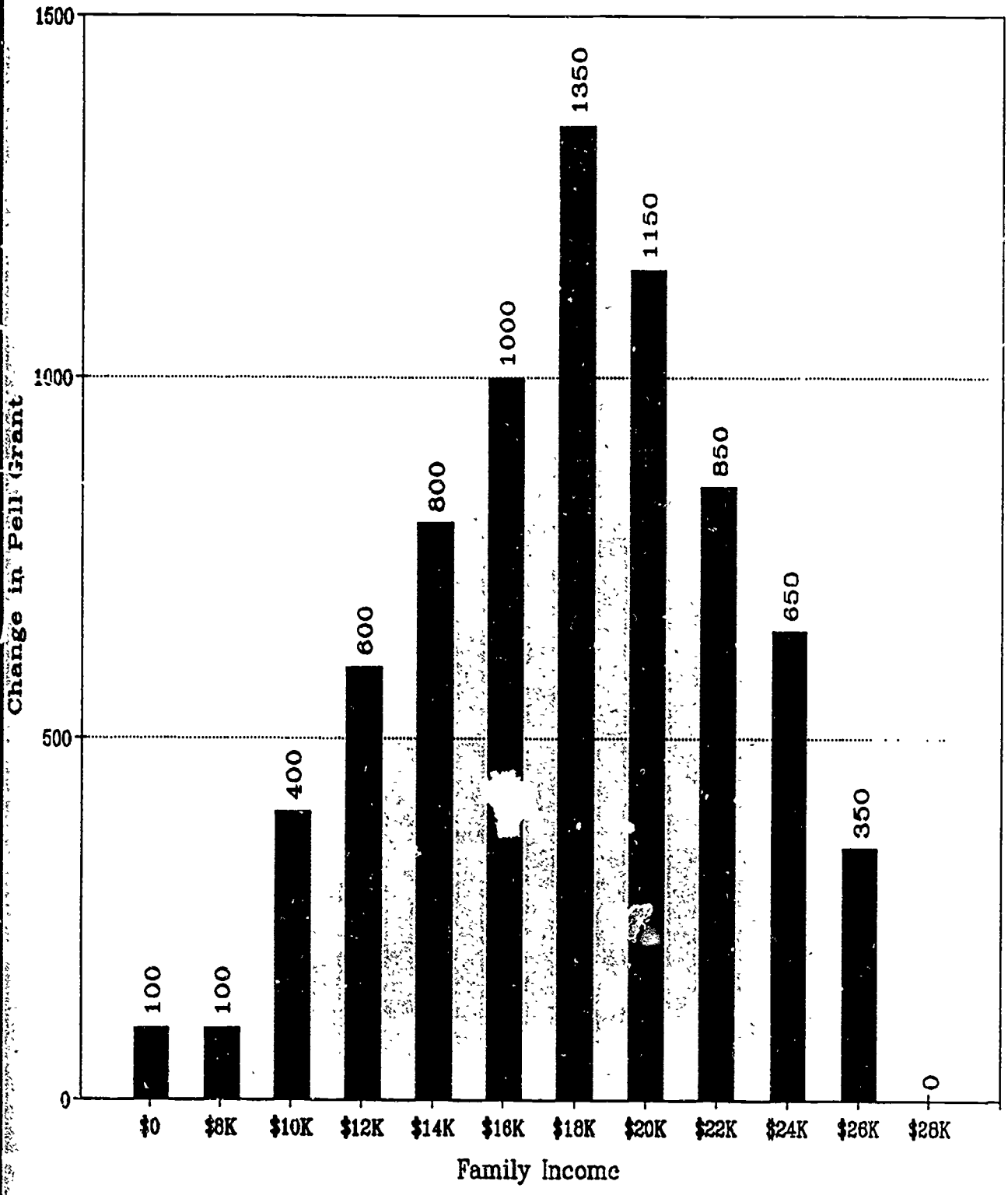


TABLE 3
Formula Simulation Results
for Dislocated Workers and Displaced Homemakers

Change in Expected Family Contribution	Total Base Year Family Income: Negative Income	$0 to $10,000	$10,000 $20,000	$20,000 $30,000	$30,000 $40,000	$40,000 $50,000	Over $50,000	Median Income
Dependents of Dislocated Workers (N=16,153)								
-$101 or more	2%	1%	5%	14%	12%	7%	7%	$31,334
-$100 to +$100	5%	17%	16%	4%	1%	0%	0%	$9,708
+$101 or more	1%	1%	2%	2%	1%	0%	0%	$20,342
Reduced Expected Family Contribution:	30%	7%	22%	71%	88%	94%	97%	
Independent Dislocated Workers (N=11,164)								
-$101 or more	31%	3%	5%	5%	2%	1%	0%	$15,976
-$100 to +$100	34%	11%	3%	0%	0%	0%	0%	$6,259
+$101 or more	4%	1%	0%	0%	0%	0%	0%	$8,301
Reduced Expected Family Contribution:	45%	20%	58%	91%	97%	99%	90%	
Dependents of Displaced Homemakers (N=14,287)								
-$101 or more	2%	3%	5%	7%	4%	2%	2%	$24,209
-$100 to +$100	11%	34%	15%	6%	3%	2%	1%	$7,352
+$101 or more	1%	0%	1%	1%	0%	0%	0%	$21,250
Reduced Expected Family Contribution:	16%	7%	22%	50%	54%	57%	59%	
Independent Displaced Homemakers (N=14,665)								
-$100 or more	6%	3%	1%	1%	0%	0%	0%	$7,289
-$100 to +$100	54%	27%	3%	1%	0%	0%	0%	$4,691
+$100 or more	2%	0%	0%	0%	0%	0%	0%	$8,046
Reduced Expected Family Contribution:	10%	11%	34%	45%	50%	48%	45%	

Source: ACT.

Clearly, the special formula treatments for dislocated workers and displaced homemakers primarily benefited the more affluent aid applicants that qualified for these special treatments. But how did this happen? The answers were derived from the details of the formulas. For example, for independent dislocated homemakers--typically recently divorced women--87 percent reported that they had no home equity at all. Thus, removing home equity from the EFC calculation could not help them. Removing home equity could only reduce the EFCs for the 13 percent of the aid applicants who had any home equity to report, and their reported incomes were higher than those who had no home equity.

There was an even more perverse consequence of this well-intentioned provision: the reduction in expected family contributions that the generally more affluent received under special treatment resulted in increased need and financial aid eligibility. In terms of federal student aid, this qualified the selected

beneficiaries for greater levels of campus-based awards through programs for which Congress reduced real levels of funding. Thus, whatever additional federal aid the benefited dislocated workers and displaced homemakers received was simply reduced to the poorer aid applicants who had used it previously.

Other federal changes. The federal shift from grants to loans after the mid 1970s, and the expanded Pell Grant eligibility legislated in 1978 and 1986, are the major federal decisions refocusing student financial aid from poor to middle and affluent family income background students. But other decisions are also worth noting.

The phase-out of Social Security survivor benefits for those over age 19 enrolled in college was originally justified on the grounds that eligibility for federal student financial aid should be need-tested. Students who would have been eligible for benefits under this program were told that henceforth they would qualify for equivalent benefits under the Pell Grant and other federal grant programs if they were needy. Thus, Social Security survivor benefits for those over age 19 were phased out between 1981 and 1985.

In fact, Social Security survivor benefits went primarily to students from low family income backgrounds. Until they were phased out, these benefits were increased along with inflation. However, before the phase-out period, the maximum Pell Grant for which the needy former beneficiaries were eligible actually decreased, from $1800 in 1979-80 to a low of $1670 by 1981-82. Between the beginning of the phase-out of Social Security survivor benefits and 1987-88, the Pell Grant maximum increased by 26 percent. During that same period of time, institutional charges in public four-year institutions increased by 50 percent and in private four-year institutions by 71 percent. Thus students previously eligible for Social Security survivor benefits were moved first into the Pell Grant Program, and when Pell Grants did not keep up with college attendance costs they were moved into educational loan programs where they could borrow, but later repay with interest, benefits which had previously been gifts.

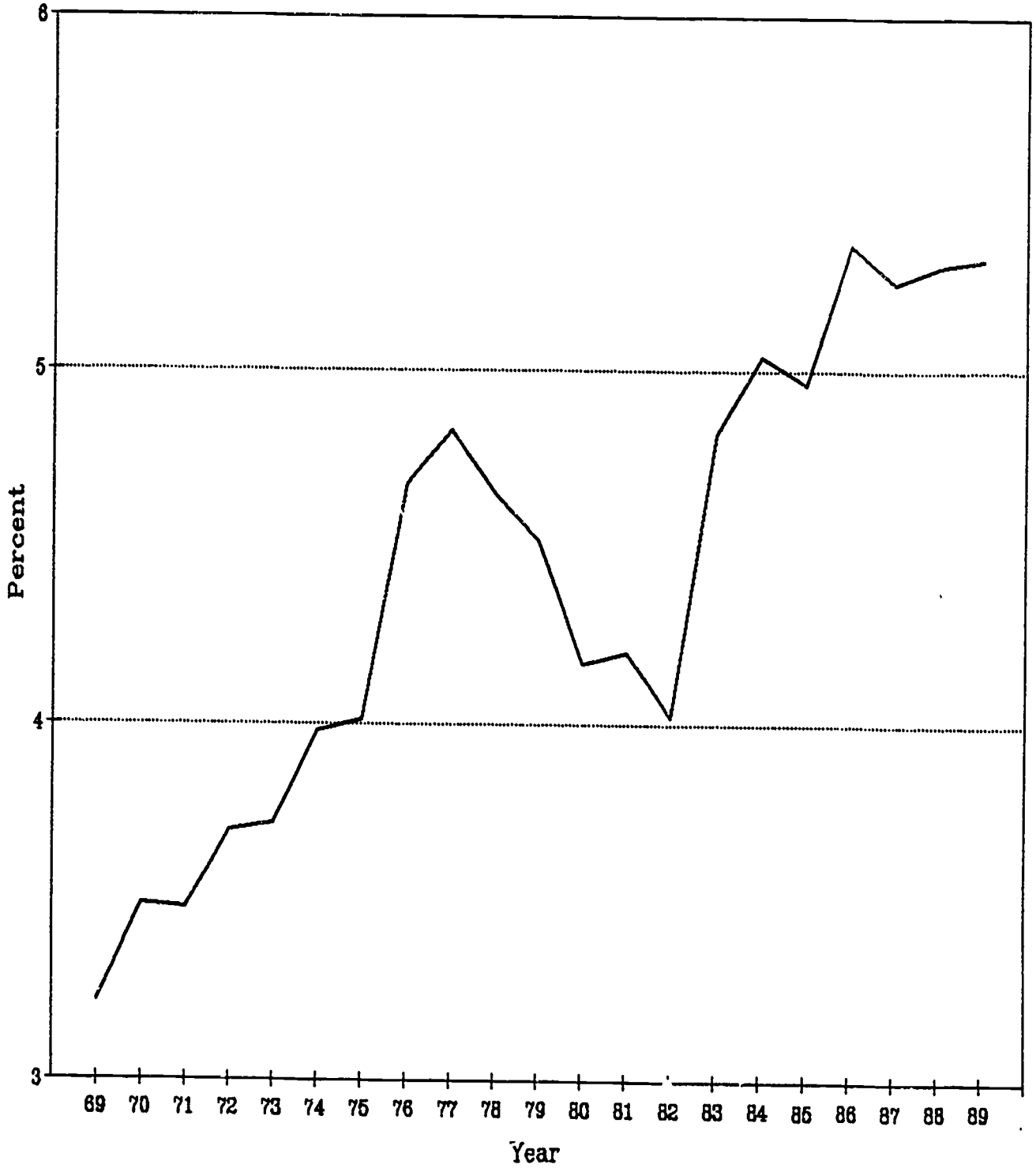
A more telling statistic is the federal provision for gift aid to students, including grants, scholarships, and benefits. In 1980-81 it stood at $6.7 billion. By 1988-89 it had dropped to $6.0 billion. Even this level is below the 1975-76 level of $6.5 billion, all in current dollars.

State Student Aid Changes

Need-tested state subsidies. States provide by far the largest share of governmental funds used to support higher education. Only a small portion of these funds is allocated to students directly as grants. This proportion generally increased between 1969 and 1986, from 3.2 to 5.4 percent of state appropriations (Figure 10). Since 1986 this proportion has remained flat. Only in a few states do appropriations for student grants constitute more than ten percent of state appropriations for higher education. Vermont and New York are the notable exceptions (Mortenson, 1983).

But not all grants to undergraduates are need-based. Since 1983-84, the annual NASSGP survey has reported that about 90 percent of undergraduate grants made by states are need-tested. And there is some trend to these data. In 1985-86, 9.0 percent of undergraduate grants were not need-tested. This

FIGURE 10
STATE SUPPORT FOR STUDENT FINANCIAL AID GRANTS AS A PROPORTION OF STATE SUPPORT FOR HIGHER EDUCATION 1969-70 TO 1989-90



Sources: NASSGP and Chambers annual surveys.

proportion has increased steadily to 11.2 percent by 1989-90. The dollars are small, but the trend is consistent with the trend in the reallocation of federal and institutional financial aid. Since 1983-84, states have increased their need-based grant appropriations to undergraduates by 53 percent, and to non-need-based grants by 82 percent. These non-need-based grants are often awarded on the basis of academic talent or promise, and therefore go disproportionately to students from relatively affluent backgrounds.

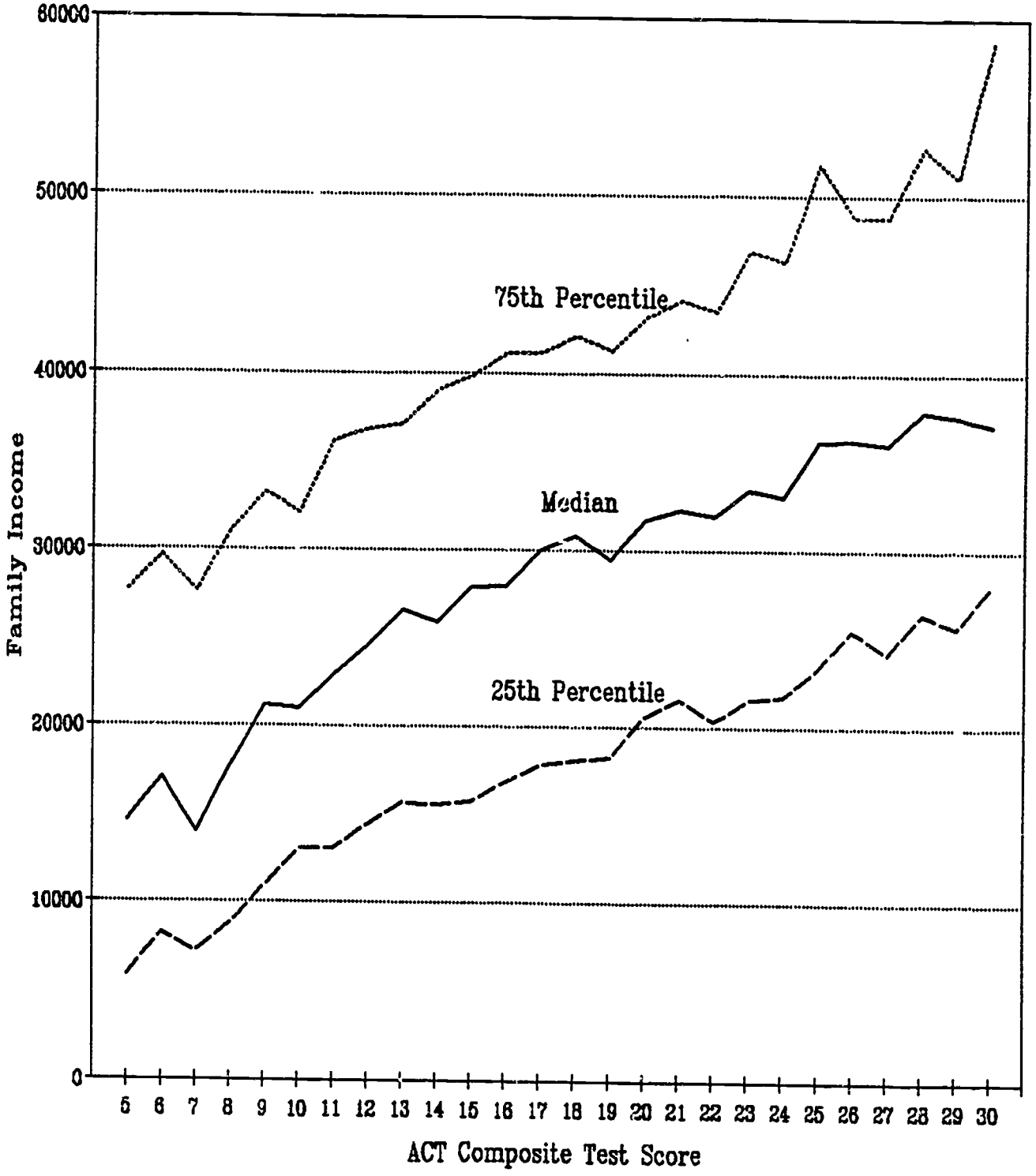
State subsidies to institutions. The bulk of state subsidies is allocated to institutions which use them to reduce tuition charged to all students without regard to each student's need for the subsidy. As a result, many students in public institutions receive large state subsidies for their educations, subsidies for which they would not qualify under a financial need test. In the National Postsecondary Student Aid Study, 51.4 percent of all undergraduates received no financial aid to attend college. This proportion increased to 58.6 percent in public institutions, and to 78.7 percent for high family income dependent students in low cost institutions (Stowe, 1989).

Moreover, the institutional subsidy is received only by students who are filtered through institutional admissions standards. Where these standards are selective, the state subsidy is reserved for students who typically come from more affluent family income backgrounds. We may illustrate this relationship with data prepared from ACT assessment and financial aid files. Figure 11 plots family income as a function of the ACT Assessment Composite score. For example, the median family income for those with ACT Composite scores of about 6 is about $15,000, while the median for those with scores of about 29 is about $38,000. Thus, institutions that practice selective admissions generally attract students from more affluent family income backgrounds. And the more selective the admissions standards, the higher the family income backgrounds of those it admits.

This is particularly true at public senior colleges and universities that practice selective admissions--admissions that may have become even more selective during the 1980s while national attention has been focused on quality of education. Generally speaking, institutions that raised their admissions standards during the 1980s experienced decreased need for student financial aid, either traditional financial aid or institutional subsidies used to keep tuition charges low.

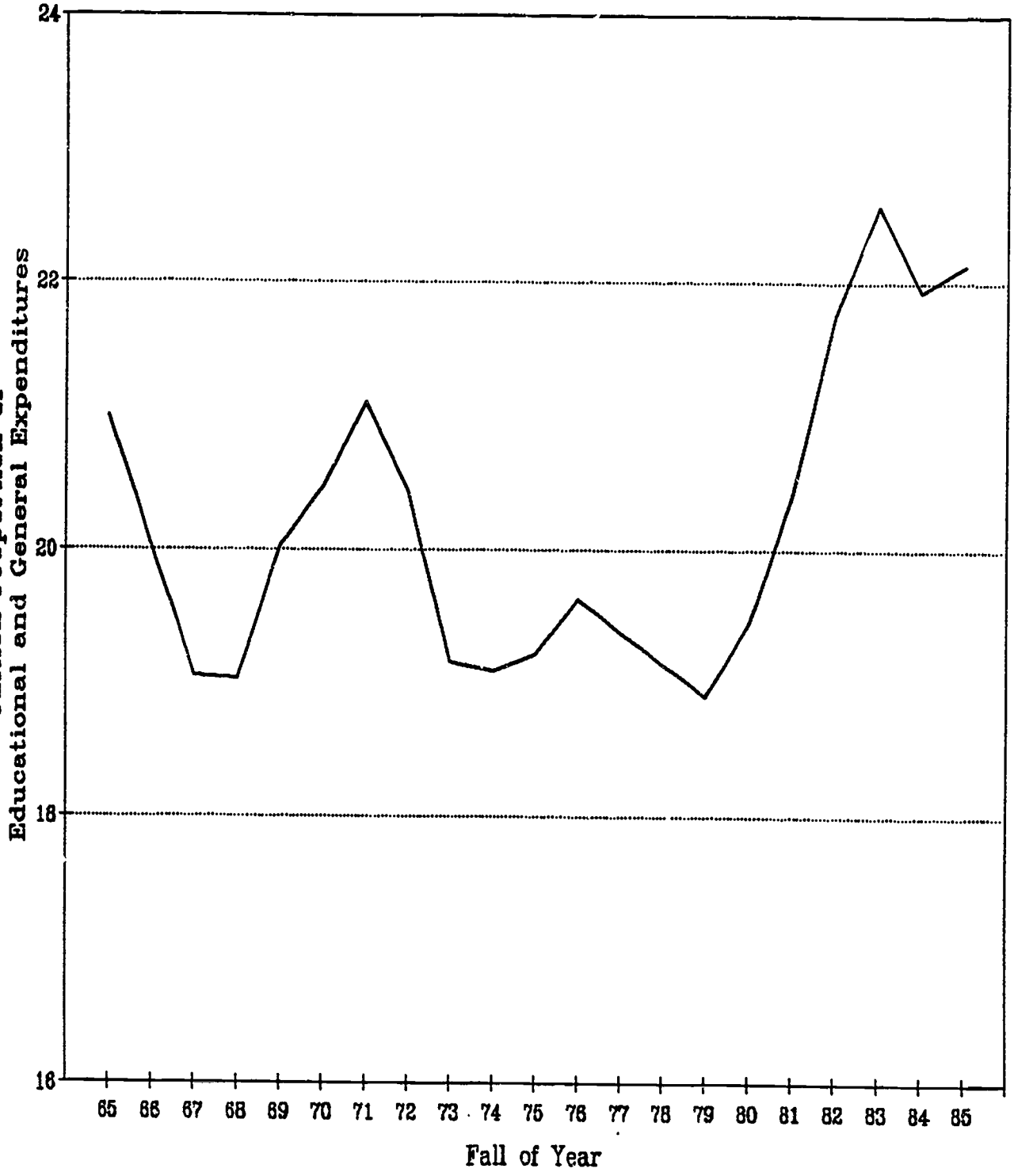
Tuition coverage of educational and general expenditures. Income from tuition and fees in public institutions of higher education covers about one-fifth of what these institutions spend to educate their students. As shown in Figure 12. this proportion fluctuated between 19 and 21 percent of educational and general (E&G) expenditures of public institutions (less expenditures for research and public service) between 1965 and 1981. Since 1982, however, this proportion has increased slightly to about 22 percent of E&G as a result of the impact of economic recession in the early 1980s on state revenues. The state revenue shortfalls during the recessions of the early 1980s apparently caused a 2 percent shift in the financial responsibility for public higher education from state taxpayers generally to students and their families in particular (and the financial aid system as well). The main finding, however, is that about four out of the five dollars used to educate a public college student come from sources other than the student and his or her family and are awarded to the student without regard to demonstrated financial need for the subsidy.

FIGURE 11
FAMILY INCOME BY ACT COMPOSITE SCORE FOR DEPENDENT COLLEGE FRESHMEN 1989



Source: ACT 1988-89 Merged AAP and CAF File.

FIGURE 12
TUITION COVERAGE OF EDUCATIONAL AND GENERAL EXPENDITURES IN PUBLIC INSTITUTIONS OF HIGHER EDUCATION 1965-66 TO 1985-86



Note: E&G less Research and Public Service.

In summary, state support for higher education may be characterized mainly as allocated across all students through institutional subsidies used to reduce the price charged to all students without regard to financial need. This effectively concentrates the states' higher educational subsidies on the more affluent, who characteristically graduate from high school, enter college, choose more costly colleges, and persist longer in higher education than students from low family income backgrounds.

The proportion of state higher educational appropriations targeted on students increased between 1969 and 1986, but still only amounts to about 5 percent of state appropriations for higher education. This share has remained flat the last four years. Within this share, however, states have gradually shifted student grants away from needs tests and toward programs that allocate awards on bases likely to favor students from more affluent family income backgrounds.

Savings programs. Since 1986 more than 30 states have enacted legislation creating some form of tuition prepayment or educational savings program (McGuinness and Paulson, 1990). These programs are designed to encourage families to "prepay" part of the cost of attending college before the child reaches college age, and to thereby reduce the later costs paid out of then-current income or deferred obligation.

The savings programs are logically directed toward families that have both the ability and desire to save for college attendance costs. A survey of financial decision makers in American families for Money magazine found that unlike most financial areas, financial concern about college increased with family income (Figure 13). Sullivan (1990) analyzed savings patterns of parents with children under 18 years from the 1986 Survey of Consumer Finances. She found that parents without any savings had an average income of $19,963, compared to $33,039 for parents with savings but none for college, and $42,486 for parents who were saving for college.

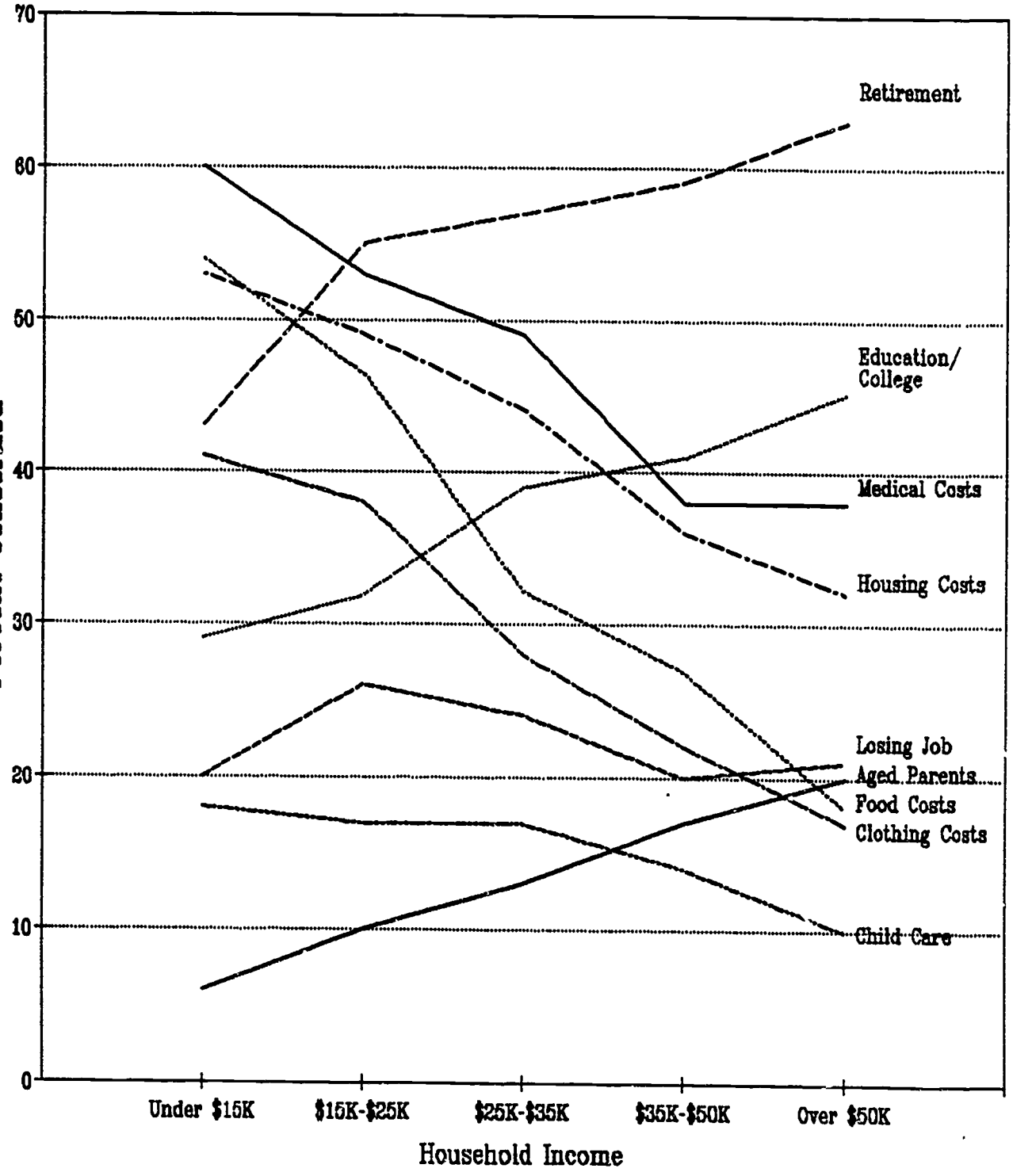
Savings programs are directed toward families with the ability to save for future college attendance costs of their children. They cannot be expected to influence the savings behavior of families from low income backgrounds. However, savings programs used by affluent families can help low income families indirectly by taking some political pressure off policy makers to expand financial aid programs to higher income aid applicants when such families have not saved for these expenses.

Institutional Student Aid Changes

Institutionally funded student financial aid has been one of the few financial aid growth stories during the 1980s. Along with federally guaranteed educational loans, institutional grants have grown in size to nearly match federal and state grant assistance in some states. This growth was first reported to be a response by institutions to the declining purchasing power of federal student aid (Green, 1988). We have since come to learn this was not the case.

Through the National Postsecondary Student Aid Study (NPSAS) we have come to learn to what kinds of students institutions allocated their own grant assistance: it was not directed to the populations that were targeted by federal and state student aid programs. The governmental grant programs were targeted

FIGURE 13
WHICH FINANCIAL AREAS DO YOU WORRY ABOUT?
BY HOUSEHOLD INCOME
1988



Source: Americans and Their Money, Money Magazine.

on the lowest income segments of the population. Institutional grants have gone disproportionately to students from more affluent family income backgrounds. Institutional student financial aid appears to be directed more toward influencing institutional choice rather than higher educational access behaviors of students.

In this section we will document the growth in institutionally funded student financial aid during the 1980s and its allocation to students from different family income levels.

Growth in institutionally funded student aid in Illinois. The Illinois Student Financial Aid Survey, conducted annually since the early 1970s, collects information from all public and private higher educational institutions in Illinois on the amounts, types, and sources of financial aid received by Illinois undergraduate and graduate students. The Illinois Survey is one of the richest sources of information available for the study of federal, state, and institutional student financial aid.

Table 4 provides information on the number of gift aid recipients and amount of gift aid Illinois undergraduates received from the major grant programs during the last decade. Among these programs the greatest growth in students aided was through institutionally funded gift aid: Pell grant recipients increased by 4,500, SEOG grant recipients decreased by 1,600, state grant recipients decreased by 3,600, and institutional grant recipients increased by 27,300. Moreover, during the last decade the growth in dollars provided through institutional grants was greater than from federal or state sources: Pell Grant dollars increased by $53 million, Illinois grant dollars by $56 million, and institutional grant dollars by $84 million. In Illinois, nearly all of this growth occurred in private institutions due to strict state controls on institutional aid awards in public universities and the absence of institutionally funded grant programs in Illinois community colleges.

TABLE 4
Illinois Undergraduate Grant Aid
1979-80 to 1988-89

Academic Year	Pell Grants Number (000)	Pell Grants Dollars (000,000)	SEOG Grants Number (000)	SEOG Grants Dollars (000,000)	State Grants Number (000)	State Grants Dollars (000,000)	Institutional Number (000)	Institutional Dollars (000,000)
1979-80	108.0	$90.8	21.7	$13.4	102.9	$83.5	26.5	$22.7
1980-81	106.3	86.6	22.8	13.7	98.7	86.2	32.5	30.7
1981-82	108.1	84.5	22.7	14.0	93.6	89.8	36.0	36.6
1982-83	106.9	91.8	22.9	13.5	105.4	92.4	45.6	50.8
1983-84	118.0	106.8	23.7	14.0	107.9	104.6	41.7	60.7
1984-85	116.2	116.4	23.9	14.3	105.0	109.7	42.3	66.2
1985-86	115.7	133.4	24.0	15.6	102.9	120.6	45.1	73.2
1986-87	102.8	121.8	21.7	14.7	99.1	128.9	47.2	85.7
1987-88	102.5	123.0	20.7	14.9	99.1	134.9	52.3	95.5
1988-89	112.5	144.2	20.1	15.5	99.3	139.7	53.8	106.2
Change:	+ 4.5	+53.4	-1.6	+2.1	-3.6	+56.2	+27.3	+83.5

Source: Illinois Board of Higher Education.

National College Freshmen Norms. The annual survey of American college freshmen conducted by the American Council on Education and the Higher Education Research Institute at UCLA provides another useful source for the study of trends in student financial aid. In a paper based on that data, Green (1988) reported that the proportion of freshmen reporting having received a Pell Grant declined from 31.5 percent in 1980 to 16.9 percent by 1986. Concurrently, Green reported a 40 percent increase in the proportion of college freshmen having received a campus-funded grant or scholarship. Unlike the Illinois experience, Green reported that nationally the proportion of freshmen reporting an institutional grant or scholarship increased by 64 percent in public universities, 69 percent in public four-year colleges, 23 percent in private universities, and 26 percent in private four-year colleges between 1980 and 1986.

These data highlight one of the major changes in student financial aid during the 1980s--the growth in the number of aid recipients and dollar volumes of institutionally funded scholarship and grant assistance. The preceding data do not tell us who benefited from the new institutional dollars. To answer this question we must go to another source: the National Postsecondary Student Aid Study.

Distribution of institutionally funded grants and scholarships. The National Postsecondary Student Aid Study was a federal attempt to capture detailed information on the financial aid system as it existed in 1986. States were offered the chance to augment the NPSAS sample to be able to conduct valid studies in their states. The following materials use data from both the New York and national undergraduate portions of NPSAS to describe the allocation of institutionally funded grants and scholarships across income levels.

Though the New York NPSAS report has not yet been published, the authors have shared some results of their study that describe the allocation of major types of federal, state, and institutional aid to full-time undergraduates by parental income level. These results are presented in Table 5.

The major financial aid programs available to New York undergraduates clearly serve different segments of the parental income distribution differently. Quantifying the populations served by each program shown in Table 5, 60 percent of those who received Pell Grants came from parental incomes of less than $20,000 per year compared to 24 percent of those who received institutional grants or scholarships. In contrast, just 9 percent of the Pell Grants were awarded to students whose parents earned more than $40,000 per year, compared to 48 percent of the institutionally awarded grants and scholarships.

The median parental incomes of aid recipients from the major programs shown tell the same story in a different way. The median parental income of Pell Grant recipients ($18,200) was about half of the median parental income of institutional grant recipients ($35,500). The median parental income of institutional grants and scholarship recipients came close to the median family incomes of all New York undergraduates ($40,100).

TABLE 5
Full-Time New York Undergraduates Who Were Awarded Aid
by Parental Income and Aid Program
Fall, 1986

Parental Income	All New York Undergraduates	Receiving Financial Aid: Pell Grant	New York Grant	Stafford Loan	Inst. Grant	Any Aid
Less than $11,000	71,740	79%	71%	37%	20%	96%
$11,000-19,999	62,902	63	69	40	28	93
$20,000-29,999	70,195	47	64	50	30	85
$30,000-39,999	78,422	22	50	43	22	76
$40,000-49,999	149,027	7	35	42	27	71
$50,000 or more	136,458	3	9	24	18	49
TOTAL	568,744	31	43	35	22	73
Median Parental Income	$40,100	$18,200	$26,200	$33,800	$35,500	$33,400

Source: New York NPSAS study, unpublished data.

The national NPSAS survey results have been reported in somewhat different format, but with similar findings. Stowe's (1989) analysis of undergraduate aid award patterns reported that high family income students were two and one half to four times more likely to receive an institutional grant or scholarship than students from low family incomes when only institutional aid was provided. But even when institutional aid was combined with federal and state aid, high family income students were still more likely to receive aid than were students from low family income backgrounds. This finding applied to both dependent and independent students, at both low cost and high costs institutions. These data are summarized in Table 6.

Institutionally funded grants and scholarships clearly go to students from considerably higher family income backgrounds than do dollars provided by governmental programs. The growth in institutional aid has not gone to offset the loss of purchasing power of federal student aid programs in the 1980s, as Green reported in 1988. Institutional aid has increased sharply during the period when federal student aid was decreasing in purchasing power. But instead of going to offset federal losses, institutional aid has gone largely to students who were not eligible for federal and state need-tested student aid programs.

These were students who did not demonstrate financial need under the major need assessment formulas used today (Pell Grant Formula and Congressional Methodology). Rather, although not financially needy they were attractive enough to institutions such that colleges should assign their institutional funds to them. This institutional practice appears to be aimed at influencing college choice--not access--among students who were almost certain to attend college anyway.

TABLE 6
Sources of Financial Aid for Dependent and Independent Undergraduates
By Institutional Cost and Family Income
1986

	Family Income Range	Undergrads Number (000)	Aided Undergrads %	Aided Undergrads N(000)	Financial Aid Source: Federal Aid Only	Inst. Aid Only	Private Aid Only	Fed & State Only	Fed & Inst. Only	Fed, State, & Inst Only	Sum	Inst. Combined With Federal & State
Total		11,185	48.6	5,431	32.8	15.2	7.7	16.4	9.0	6.9	88.0	31.1
DEPENDENT STUDENTS		7,048	47.8	3,367	28.0	18.4	5.3	15.5	10.0	8.6	84.8	37.0
Low Cost:												
Low Family Income	LT $18,641	960	56.9	547	33.1	14.1	5.8	25.5	5.8	5.0	89.3	21.8
Medium Fam. Inc.	$18,641-$36,076	1,306	38.4	501	30.1	23.8	7.9	17.5	4.7	3.0	87.0	31.5
High Fam. Inc.	GT $36,076	1,678	21.3	357	24.9	37.4	12.7	5.5	4.0	1.3	85.8	42.7
High Cost:												
Low Family Income	LT $18,641	665	84.6	563	31.5	6.6	1.3	22.3	11.2	14.8	87.7	32.6
Medium Fam. Inc.	$18,641-$36,076	884	73.1	647	24.3	10.6	2.6	15.7	13.4	16.5	83.1	40.5
High Fam. Inc.	GT $36,076	1,553	48.4	752	25.0	24.7	4.9	6.1	15.7	6.9	83.3	47.3
INDEPENDENT STUDENTS		4,138	49.9	2,064	39.5	10.0	11.6	18.0	7.4	4.0	90.5	21.4
Low Cost:												
Low Family Income	LT $3,028	690	59.4	409	42.9	7.2	4.2	26.2	7.9	3.5	91.9	18.6
Medium Fam. Inc.	$5,028-$15,767	729	55.2	402	41.1	9.8	4.9	24.3	7.8	3.2	91.1	20.8
High Fam. Inc.	GT $15,767	1,738	28.4	494	28.4	18.2	34.2	4.3	3.7	1.1	89.9	23.0
High Cost:												
Low Family Income	LT $5,028	310	87.4	271	42.1	3.8	1.7	24.0	9.6	7.8	89.0	21.2
Medium Fam. Inc.	$5,028-$15,767	336	88.4	297	47.1	3.1	2.3	21.4	9.7	7.5	91.1	20.3
High Fam. Inc.	GT $15,767	325	57.4	186	41.5	14.2	11.4	8.5	8.1	4.2	87.9	26.5

Source: National Postsecondary Student Aid Study, Stowe, 1989.

III. The Enrollment Effects

Thus far in this paper we have described the shift in student financial aid away from students from low family income backgrounds and toward students from middle and high family incomes. To the extent that financial aid influences college enrollment behaviors, we should be able to identify enrollment changes that have occurred since passage of the Middle Income Student Assistance Act of 1978 when the shift in student aid began. In this section we will attempt to do so. This section is taken from a more extensive ACT study (to be published later) of higher educational participation by students from different family income levels.

College enrollment behaviors include access, choice, persistence, and degree attainment. Financial aid has a greater effect on the first two of these behaviors than on the last two. Moreover, and especially for this study, financial aid is known to influence the enrollment behaviors of lower income students more than it does higher income students. The full range of influences on enrollment behavior include long range investment objectives, short term consumption considerations, a number of college attendance costs, and the capacity of higher education to enroll the student. This mix of factors--including student financial aid--produces the higher education participation behaviors documented in this section.

Higher Education Participation by Family Income Levels

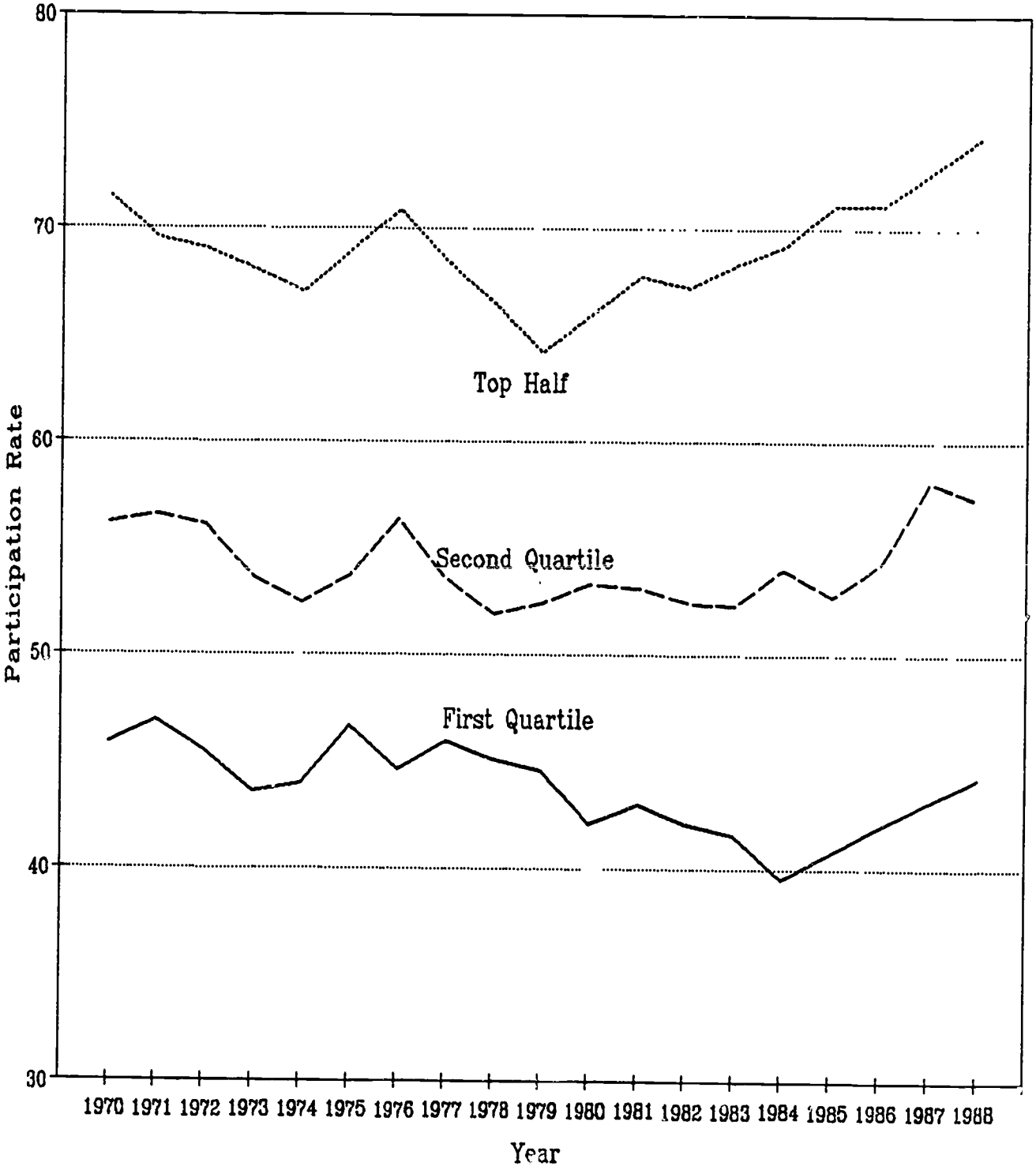
The Census Bureau's Current Population Survey has gathered and reported data on the college participation behavior of 18 to 24 year olds by family income since 1970. These data permit detailed examination of trends in college enrollment behavior. Here we will identify the major finding in low income participation in higher education during the 1980s, and further describe this condition for males, females, whites, blacks, and Hispanics.

For this study we have analyzed the college participation rates for unmarried high school graduates age 18 to 24 by family income intervals for each year from 1970 through 1988. The family income intervals used in the following charts are the bottom quartile, second quartile, and top half of the distribution of family incomes of families with unmarried 18 to 24 year olds living in them. In 1988, for example, a quarter of the unmarried 18 to 24 year olds lived in families with incomes up to $19,667. The second quartile included family incomes from $19,667 to $34,904. The top half was defined by the lower bound of $34,904. (See Appendix Table A-2 for income limit definitions for prior years.)

In Figure 14, college participation includes those currently enrolled in college, plus those who have been enrolled in college and either graduated or dropped out of college but were not enrolled at the time of the Current Population Survey. Family income is for 18 to 24 year olds who are unmarried. That is, in most cases these are individuals who are living with their parents and the family income reported is therefore mainly that of the parents.

The first major pattern in this data is that college participation rates have been strongly related to family income at least since 1970. Students from families whose incomes rank them in the bottom or first quartile of the family income distribution are or have been enrolled in college at lower rates

FIGURE 14
COLLEGE PARTICIPATION RATES FOR UNMARRIED HIGH SCHOOL GRADUATES AGE 18 TO 24 YEARS BY FAMILY INCOME QUARTILES 1970 TO 1988



Source: Current Population Survey, Series P-20.

than individuals from higher family income backgrounds. In 1988, the college participation rate for unmarried 18 to 24 year olds from the bottom quartile of the family income distribution was 44.3 percent, compared to 57.3 percent from the second quartile, and 74.3 percent from the top half. That is to say, an unmarried 18 to 24 year old high school graduate from the bottom quartile had only about 60 percent of the chance of a person from the top half of the family income distribution to have participated in college by 1988. An 18 to 24 year old high school graduate from the second quartile of the family income distribution had about 77 percent of the chance of a person from the top half of the distribution to have participated in higher education.

The second major pattern in these data is derived from Figure 14, and appears in Figures 15 and 16. Figure 15 plots the difference in the college participation rates of unmarried 18 to 24 year old high school graduates between the lowest quartile and those from the top half of the family income distribution. This suggests the participation gap that financial aid intended to overcome. In fact, many conditions produce the difference--or college participation gap--shown in Figure 15, including lack of preparation and commitment to achievement in higher education.

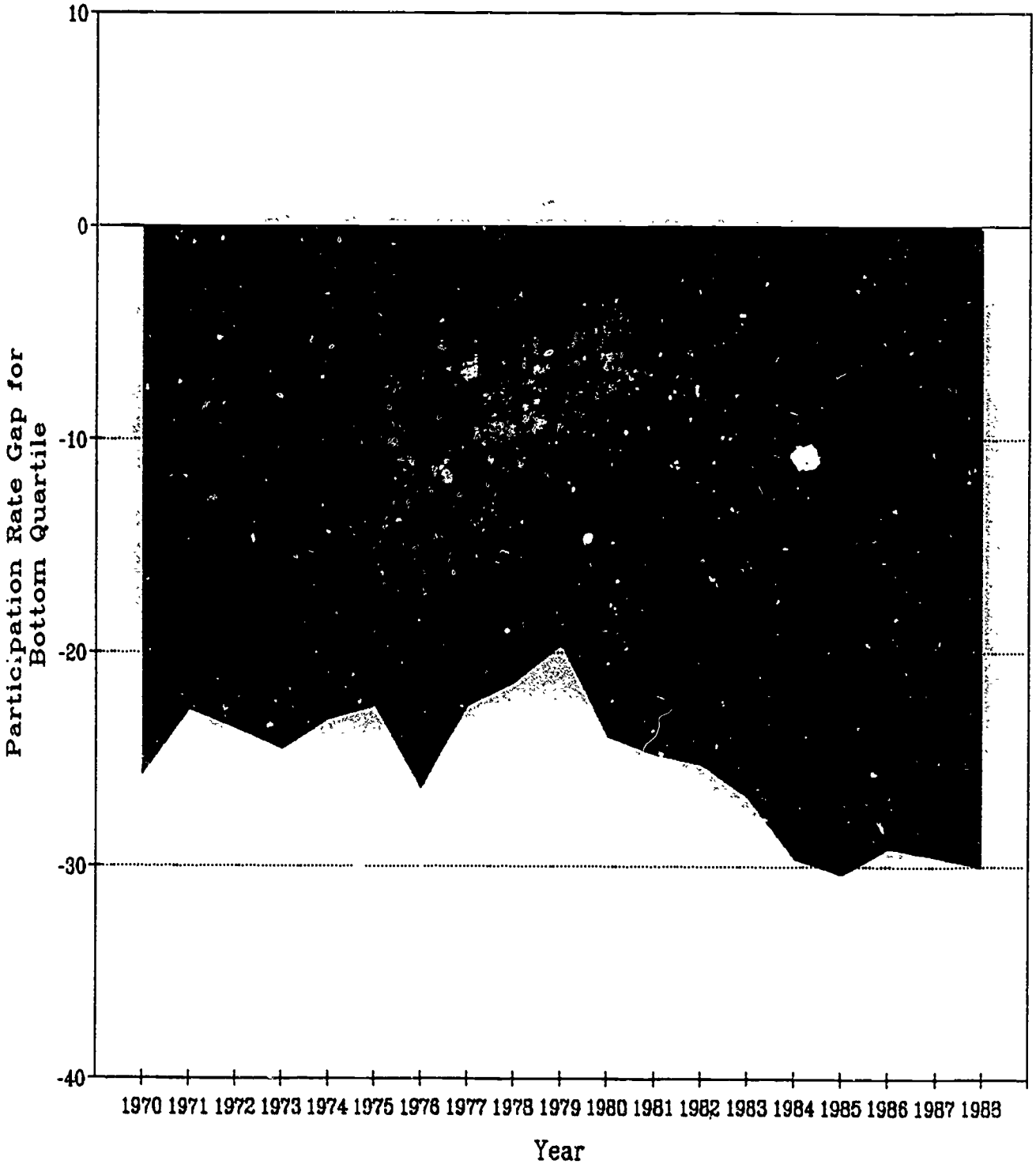
However, fluctuations in the difference between the two rates are of particular concern to public policy performance assessment. As shown in Figure 15, the college participation rate gap closed from 24.5 percent in 1973 to 19.6 percent by 1979. After 1979 the gap reopened to 30.0 percent by 1988. The progress made during the 1970s in closing the college participation rate gap was erased during the 1980s. Worse yet, the gap was wider after 1982 than it had ever been during the 1970s.

A similar, although less dramatic picture, emerges in Figure 16. For students from the second quartile of family incomes, the college participation rate gap held roughly steady during the 1970s, but has widened during the 1980s. This gap was wider during the mid and late 1980s than it had ever been during the 1970s.

The data in Figures 14 to 16 tell a compelling story of growing inequality of higher educational participation between persons from different ends of the family income spectrum. Powerful labor market signals call for ever greater levels of educational attainment in the American work force, particularly during the 1980s. Young persons from the top half of the family income distribution responded to these signals beginning in 1980 and continue to do so. Young persons from the bottom quartile began to respond in 1985 and continue to do so. But the five year delay put them farther behind the college participation rates of their affluent peers than they had ever been before. By 1988 the gap has not closed at all--it remains as wide as ever.

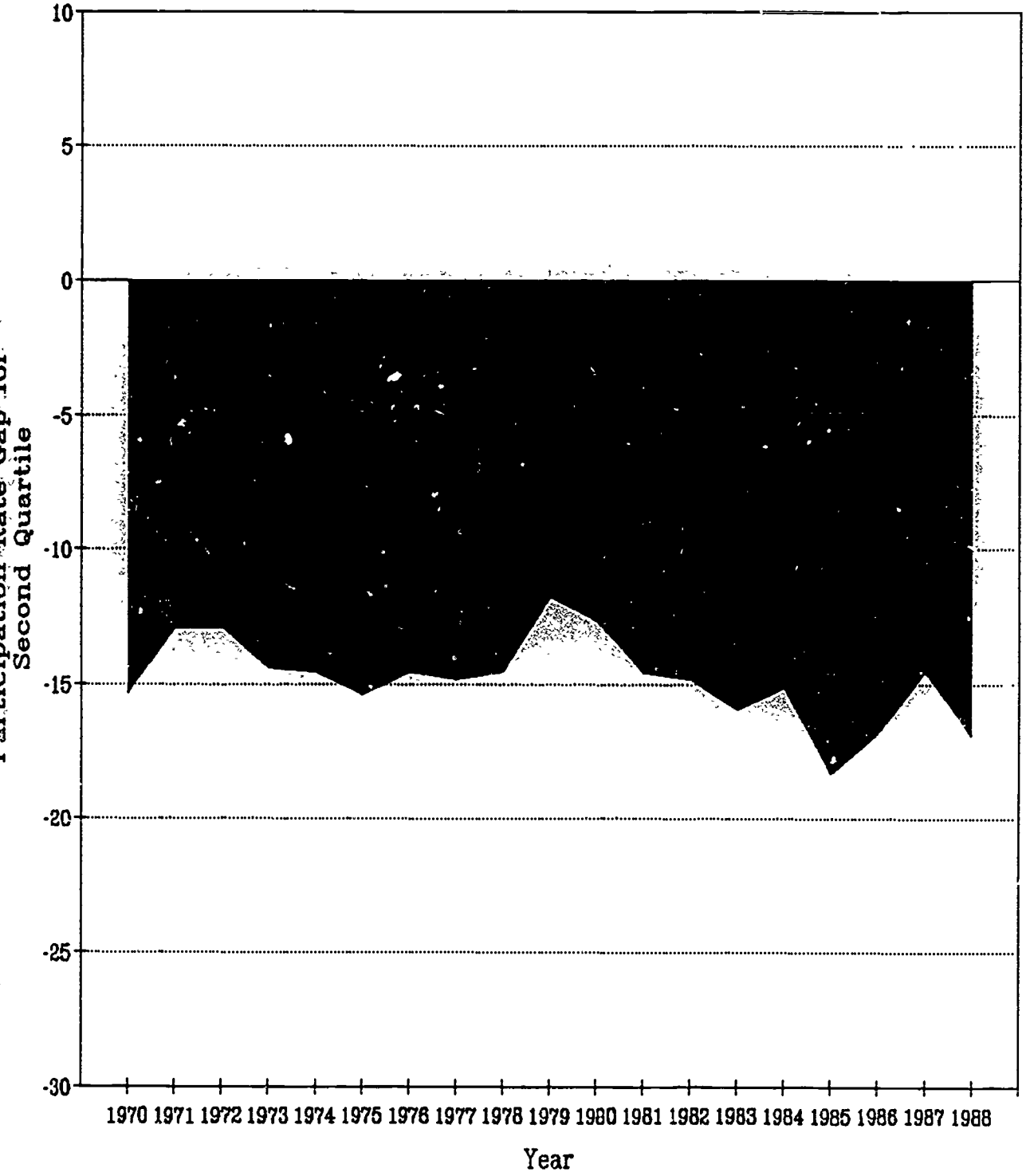
To the extent student financial aid was designed to address economic inequality of higher educational opportunity, Figures 15 and 16 condemn the performance of student financial aid programs during the 1980s. Whatever was gained during the 1970s was more than lost during the 1980s for persons from the lower half of the family income distribution generally, and the bottom quartile in particular. To the extent student financial aid has been refocused from poor to middle income and affluent students, it appears to have contributed to the growing inequality of higher educational participation between those from low family income backgrounds and those from middle income and affluent family income backgrounds.

FIGURE 15
COLLEGE PARTICIPATION RATE GAP FOR UNMARRIED HIGH SCHOOL GRADUATES AGE 18 TO 24 YEARS FROM LOWEST FAMILY INCOME QUARTILE 1970 TO 1988



Source: Current Population Survey, Series P-20.

FIGURE 16
COLLEGE PARTICIPATION RATE GAP FOR UNMARRIED HIGH SCHOOL GRADUATES AGE 18 TO 24 YEARS FROM SECOND FAMILY INCOME QUARTILE 1970 TO 1988



Source: Current Population Survey, Series P-20.

Gender. Figure 17 shows the college participation rates for unmarried male high school graduates age 18 to 24 between 1970 and 1988. The pattern is similar to the pattern depicted in Figure 14: college participation rates vary directly with income. They are highest among those from highest income families, and lowest among those from lowest income families.

For the purpose of analysis here, we illustrate the difference between the college participation rates of males from the top half and bottom quartile of the family income distribution in Figure 18. This difference, or gap, appears to have been closing between 1970 and 1979, and to have widened since then.

A somewhat similar story is told by data on unmarried female high school graduates age 18 to 24 between 1970 and 1988. Figure 19 shows the college participation rates by family income levels, and again the rates vary directly with family income. College participation rates are highest for those from highest family income backgrounds, and lowest for those from lowest family income backgrounds.

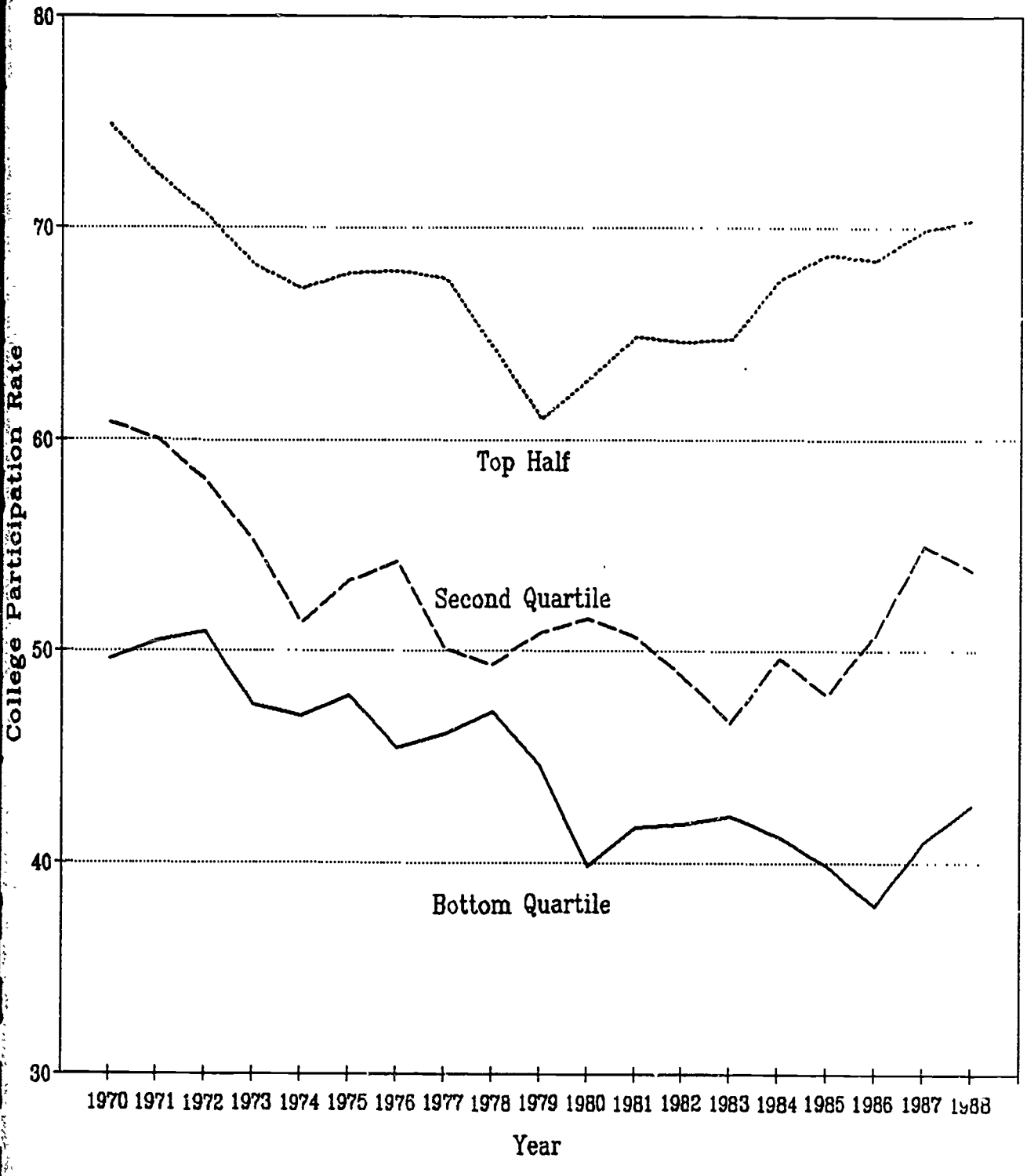
The difference in the rates for females from the top half and bottom quartile is shown in Figure 20. While this chart shows no progress in closing the college participation rate between 1970 and 1979, since 1979 the gap has clearly and substantially widened.

Race/ethnicity. Figures 21, 23, and 25 plot the college participation rates for unmarried white, black, and Hispanic high school graduates age 18 to 24. The patterns show some interesting variations, but the general finding still holds: college participation rates vary directly with family income for all three groups.

More important is the consistency of the finding that the gap between the rates for those from low and high family income backgrounds was less during the 1970s than during the 1980s. Figures 22, 24, and 26, show the gaps for whites, blacks, and Hispanics respectively. For whites, the difference between the college participation rates of top half and bottom quartile high school graduates increased by 4.3 percent between the 1970s and the 1980s. For blacks the difference increased by 4.9 percent. And for Hispanics, the difference increased by 5.4 percent.

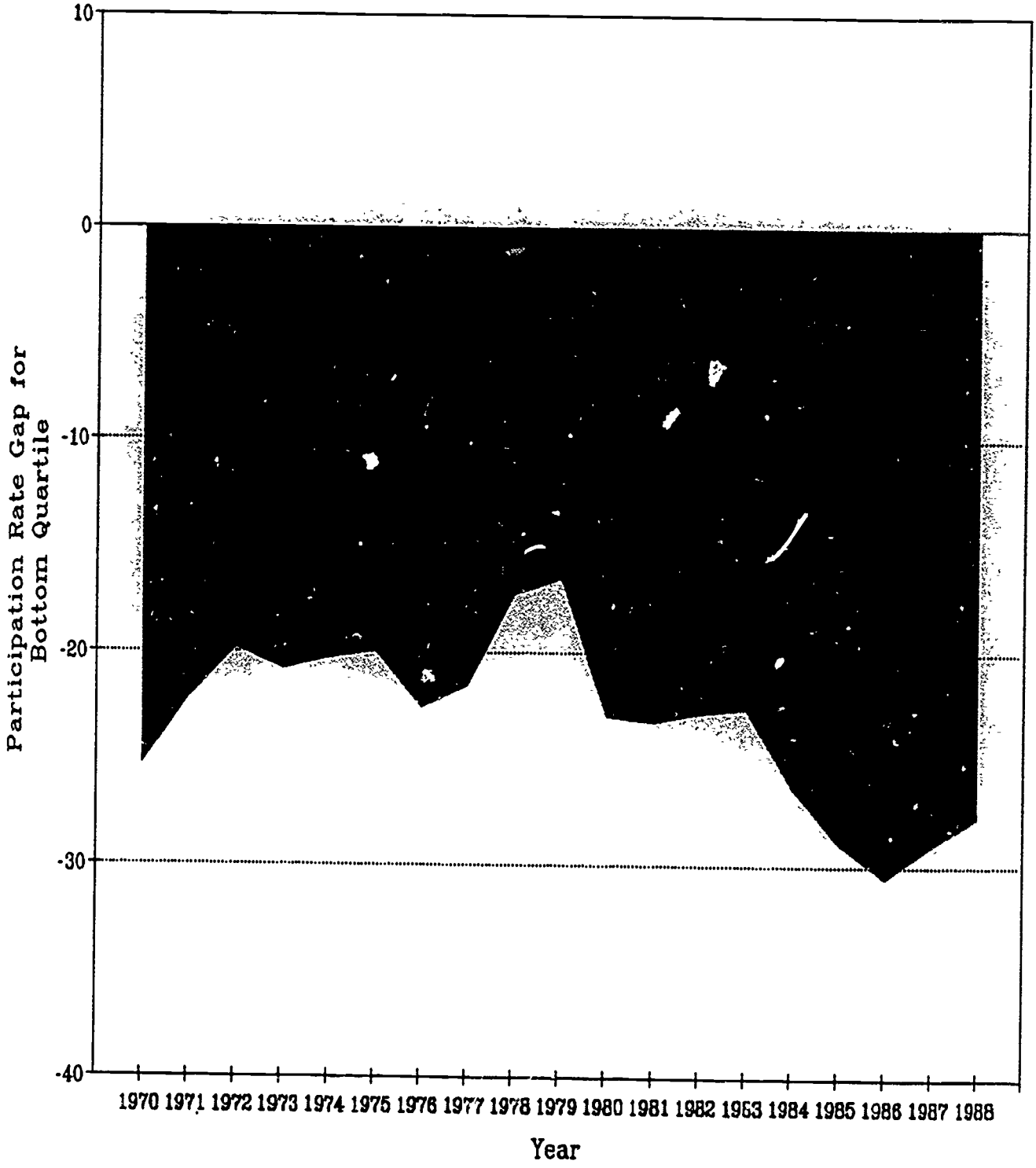
Neither gender nor race/ethnicity prevented a deterioration in college participation rates for bottom quartile high school graduates during the 1980s.

FIGURE 17
COLLEGE PARTICIPATION RATES FOR UNMARRIED MALE HIGH SCHOOL GRADUATES AGE 18 TO 24 YEARS BY FAMILY INCOME QUARTILES 1970 TO 1988



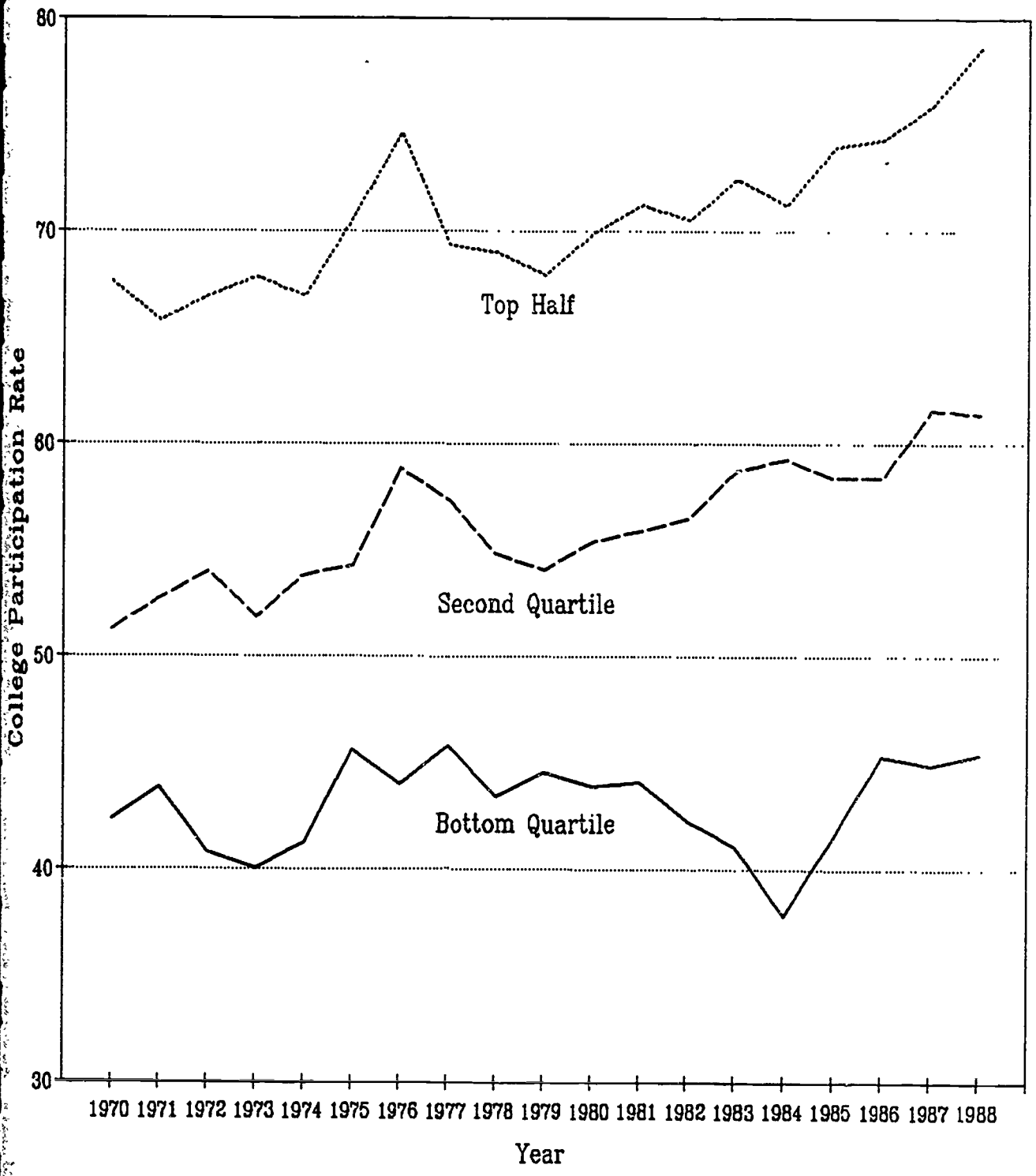
Source: Current Population Survey, Series P-20.

FIGURE 18
COLLEGE PARTICIPATION RATE GAP FOR UNMARRIED MALE HIGH SCHOOL GRADUATES AGE 18 TO 24 YEARS FROM LOWEST FAMILY INCOME QUARTILE, 1970 TO 1988



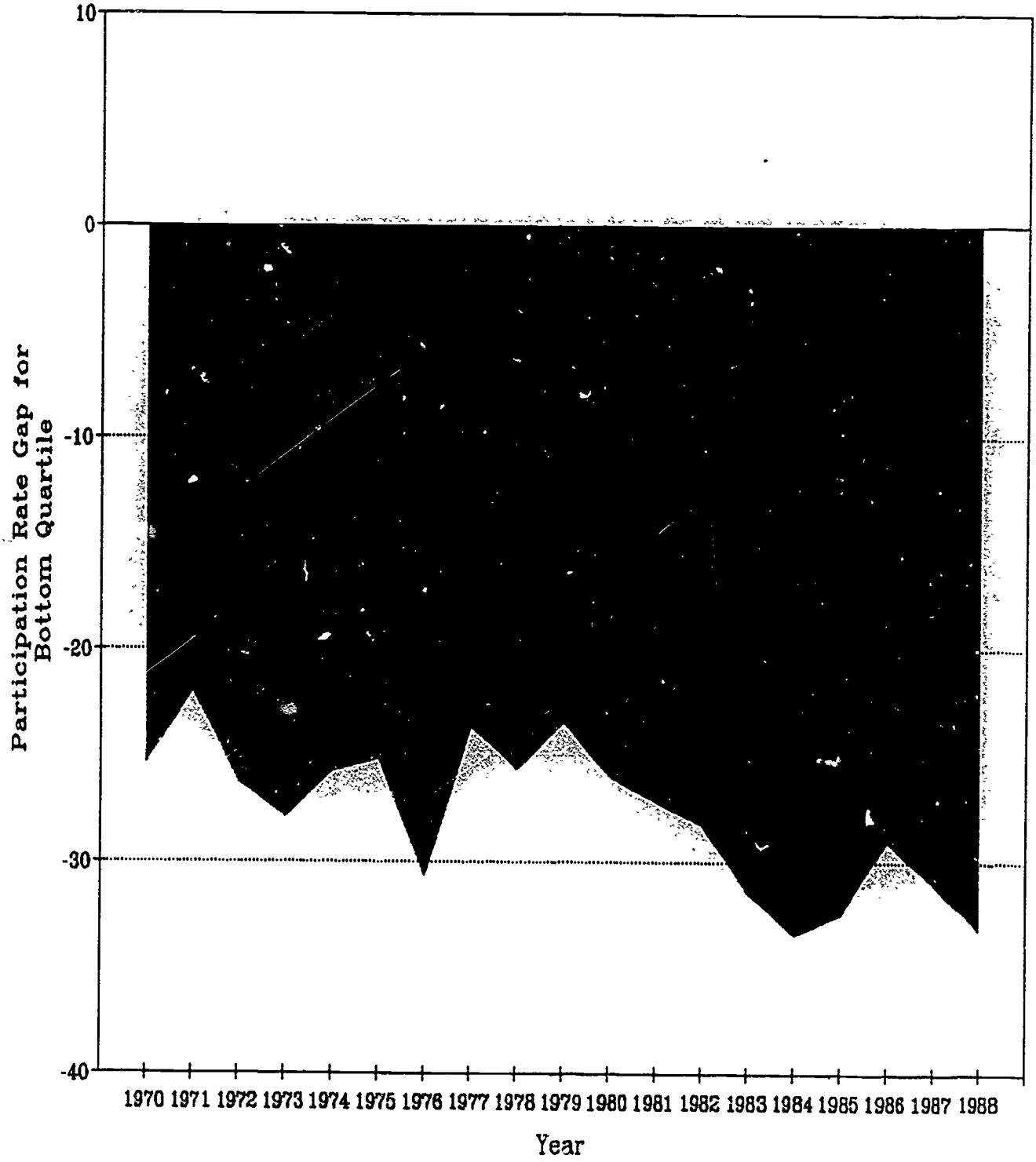
Source: Current Population Survey, Series P-20.

FIGURE 19
COLLEGE PARTICIPATION RATES FOR UNMARRIED FEMALE HIGH SCHOOL GRADUATES AGE 18 TO 24 YEARS BY FAMILY INCOME QUARTILES 1970 TO 1988



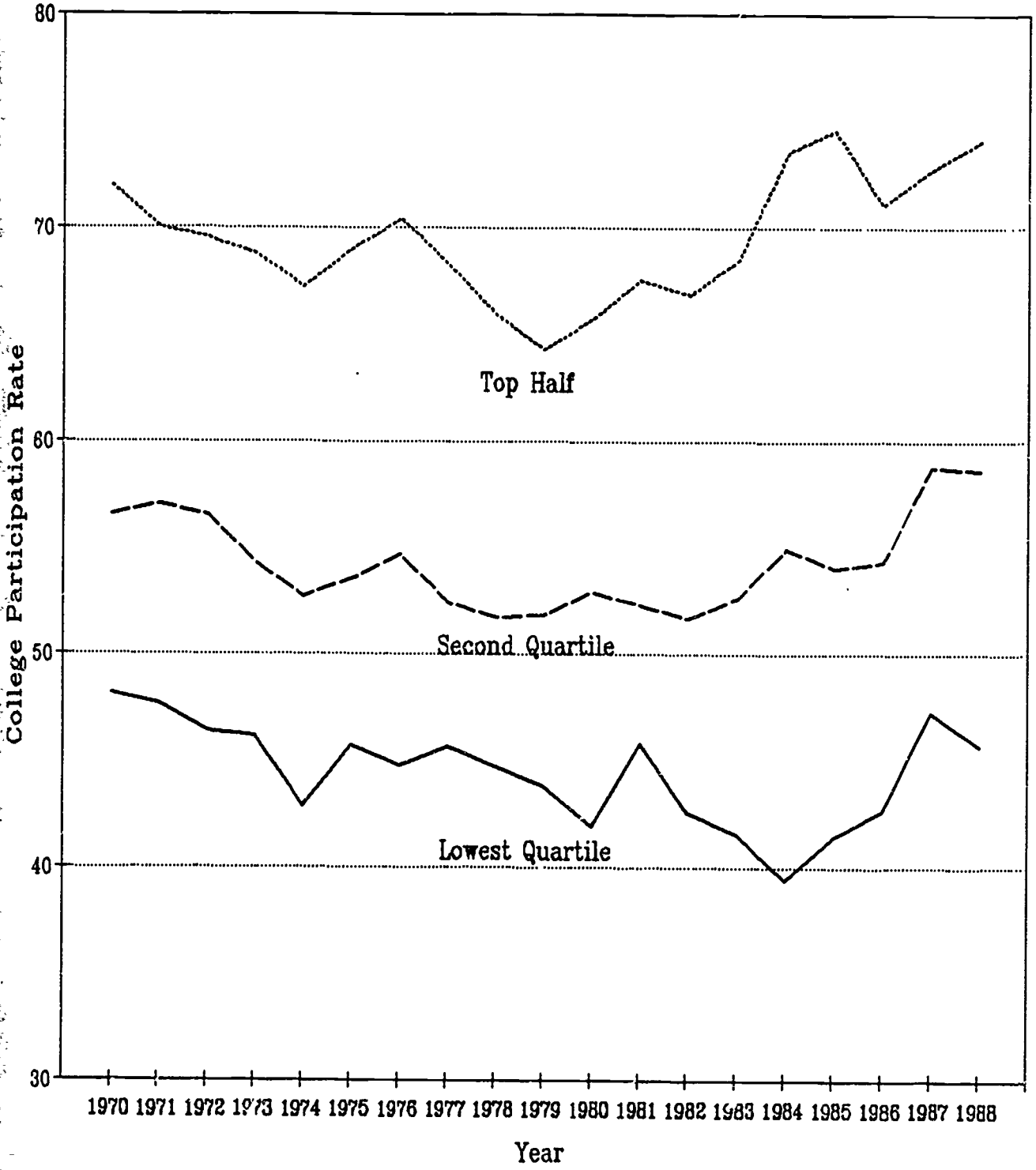
Source: Current Population Survey Series P-20.

FIGURE 20
COLLEGE PARTICIPATION RATE GAP FOR UNMARRIED FEMALE HIGH SCHOOL GRADUATES AGE 18 TO 24 YEARS FROM LOWEST FAMILY INCOME QUARTILE, 1970 TO 1988



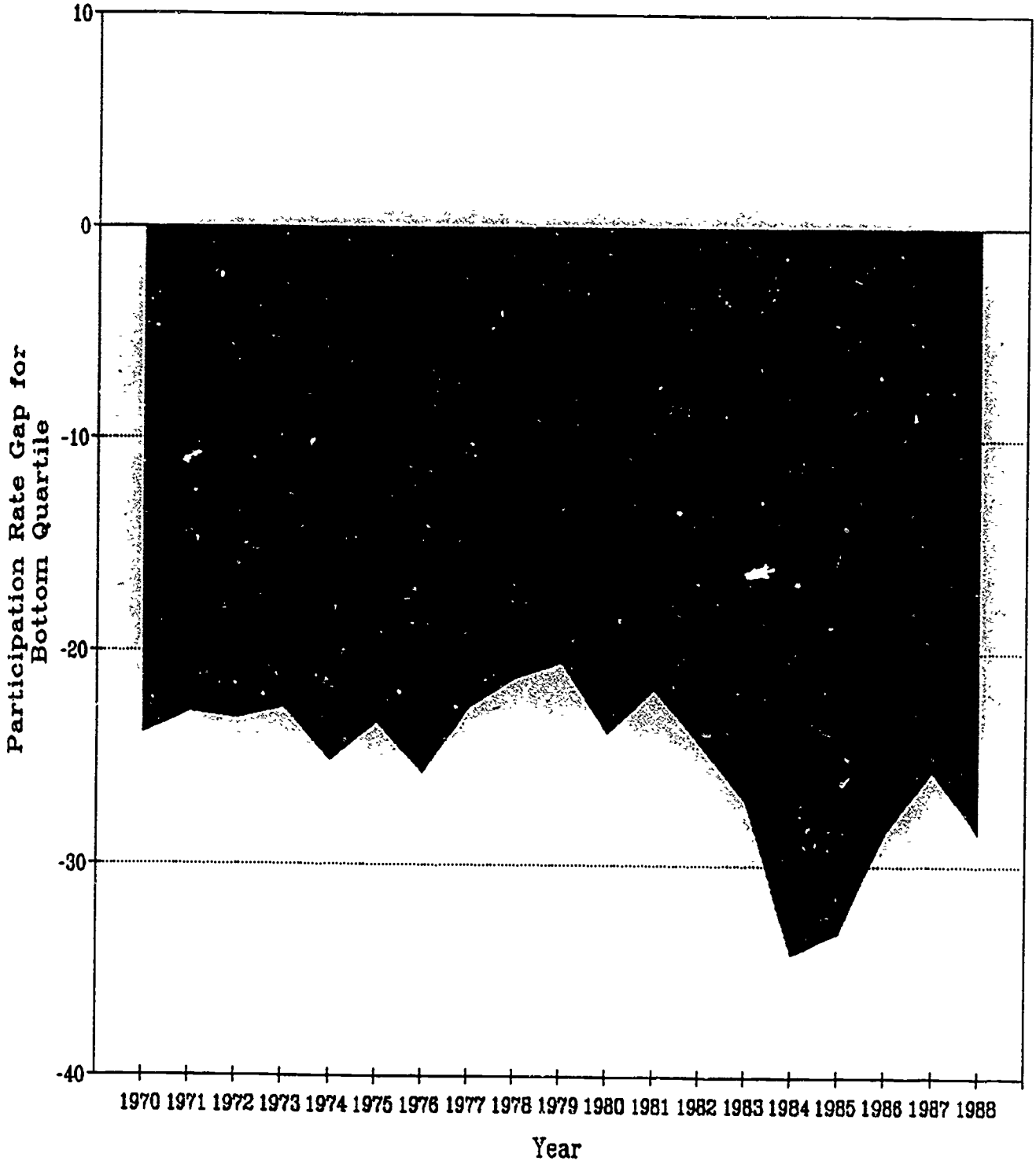
Source: Current Population Survey, Series P-20.

FIGURE 21
COLLEGE PARTICIPATION RATES FOR UNMARRIED WHITE HIGH SCHOOL GRADUATES AGE 18 TO 24 YEARS BY FAMILY INCOME QUARTILES
1970 TO 1988



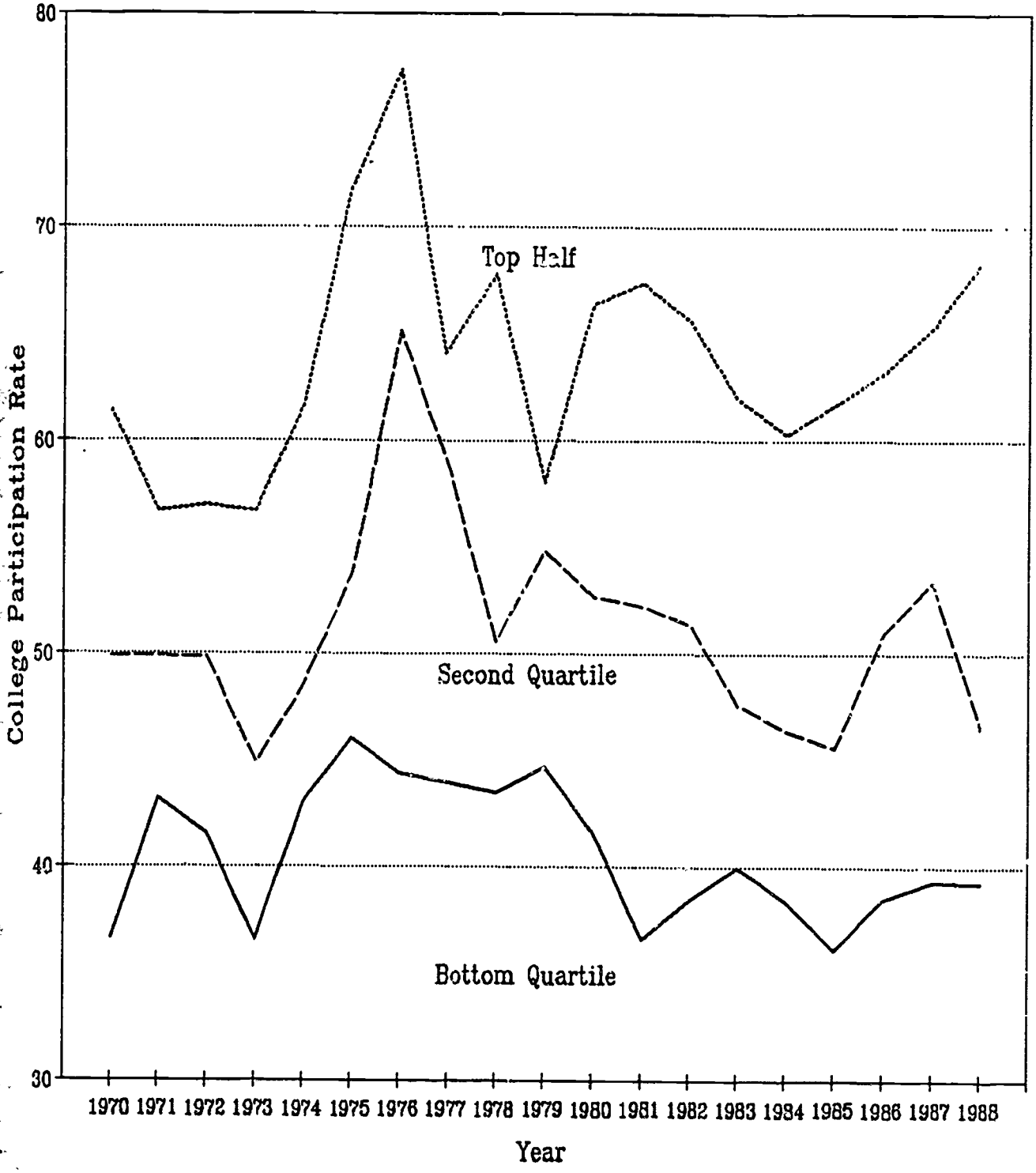
Source: Current Population Survey, Series P-20.

FIGURE 22
COLLEGE PARTICIPATION RATE GAP FOR UNMARRIED WHITE HIGH SCHOOL GRADUATES AGE 18 TO 24 YEARS FROM LOWEST FAMILY INCOME QUARTILE, 1970 TO 1988



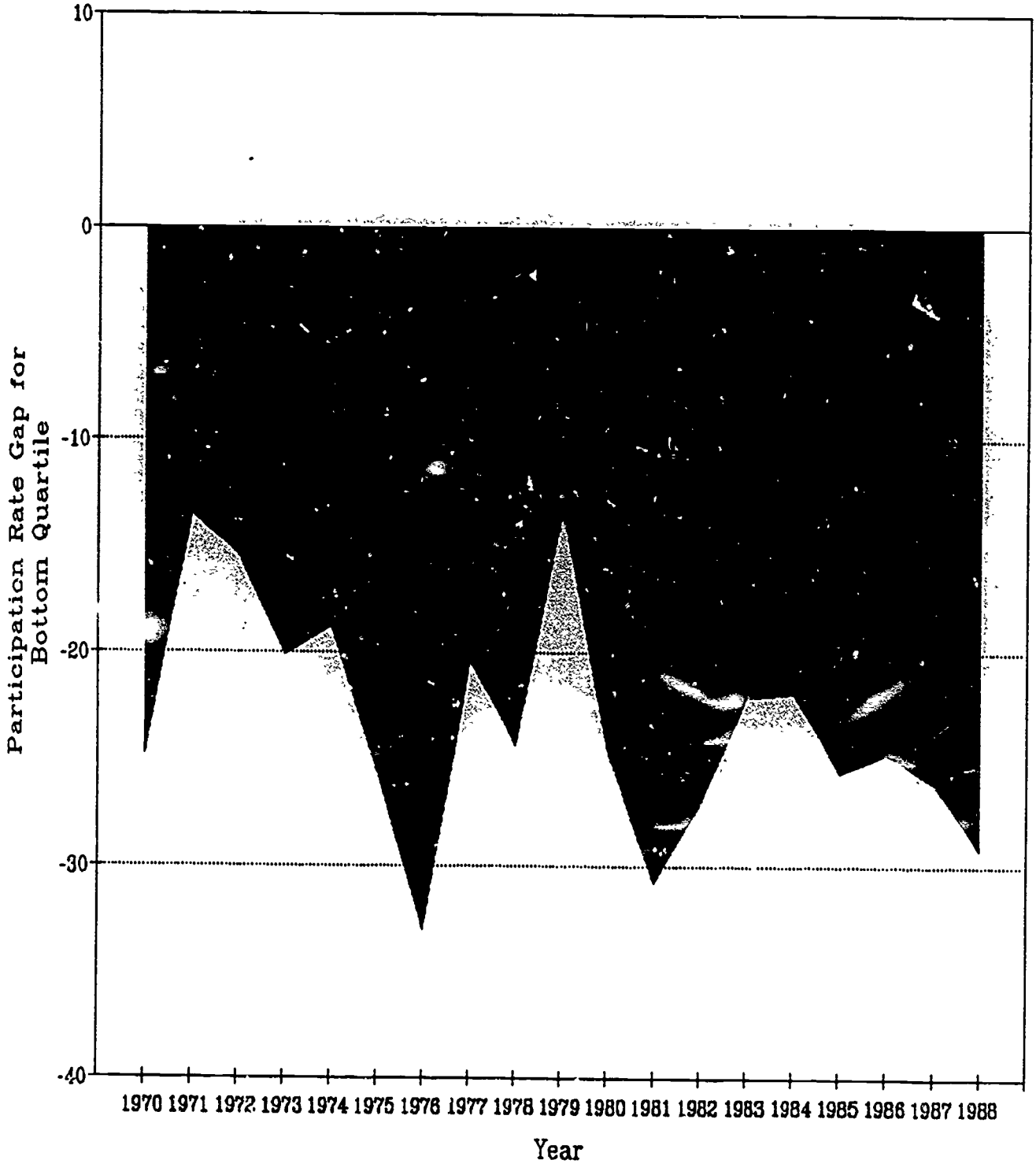
Source: Current Population Survey, Series P-20.

FIGURE 23
COLLEGE PARTICIPATION RATES FOR UNMARRIED BLACK HIGH SCHOOL GRADUATES AGE 18 TO 24 YEARS BY FAMILY INCOME QUARTILES 1970 TO 1988



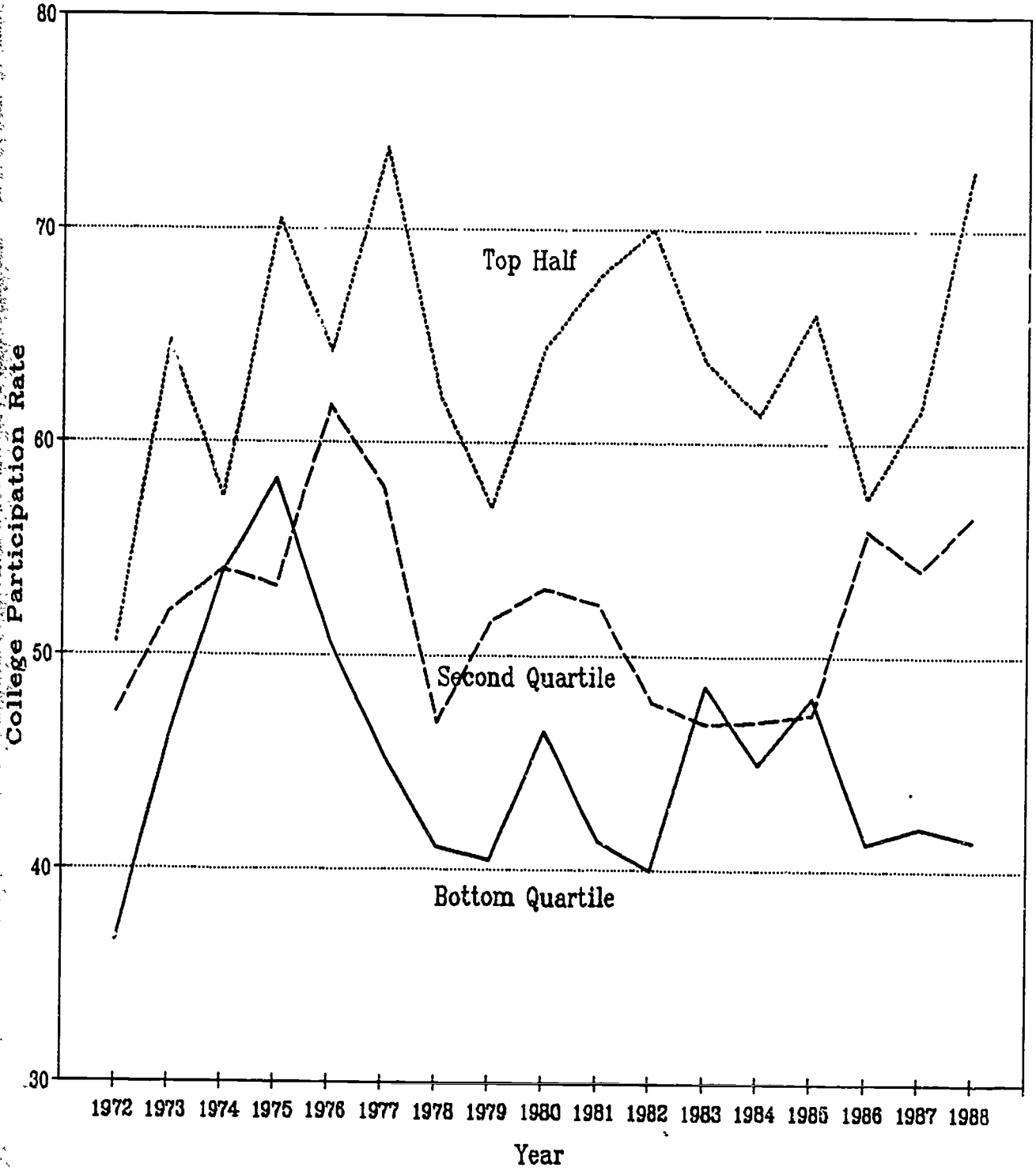
Source: Current Population Survey, Series P-20.

FIGURE 24
COLLEGE PARTICIPATION RATE GAP FOR UNMARRIED BLACK HIGH SCHOOL GRADUATES AGE 18 TO 24 YEARS FROM LOWEST FAMILY INCOME QUARTILE, 1970 TO 1988



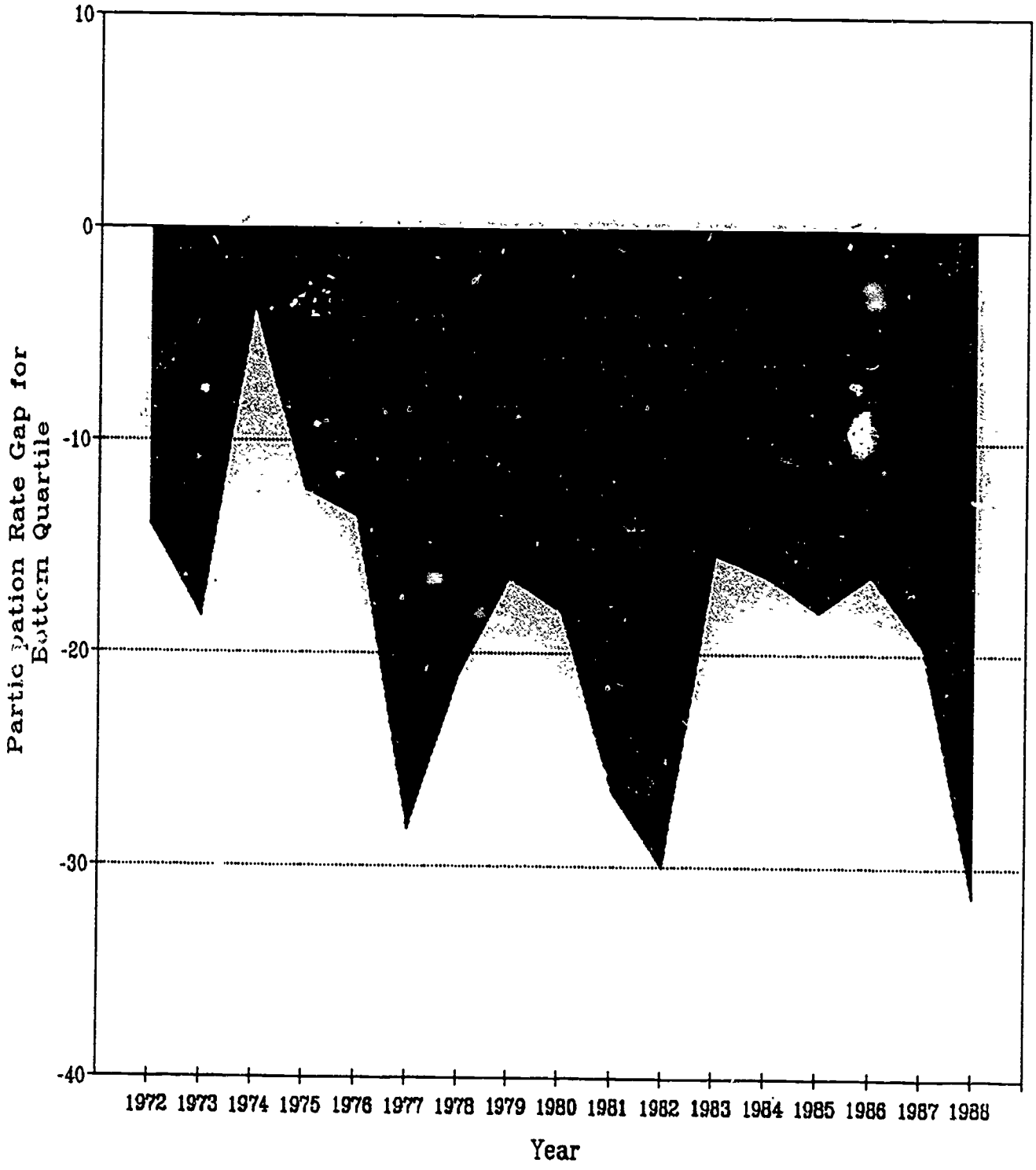
Source: Current Population Survey, Series P-20.

FIGURE 25
COLLEGE PARTICIPATION RATES FOR UNMARRIED HISPANIC HIGH SCHOOL GRADUATES AGE 18 TO 24 YEARS BY FAMILY INCOME QUARTILES 1972 TO 1988



Source: Current Population Survey, Series P-20.

FIGURE 26
COLLEGE PARTICIPATION RATE GAP FOR UNMARRIED HISPANIC HIGH SCHOOL GRADUATES AGE 18 TO 24 YEARS FROM LOWEST FAMILY INCOME QUARTILE, 1972 TO 1988



Source: Current Population Survey, Series P-20.

IV. Influences on Financial Aid Policy

The changes in the design of federal, state, and institutional student financial aid programs since 1978 are the direct result of dynamic influences within the processes that create, recreate, and fund them. In this section we will explore the political and economic influences acting on the student financial aid system that have shifted the focus of student financial aid from low family income students to middle and affluent family income students.

Political Influences in Governmental Programs

Who votes. Federal and state higher educational programs are the result of political processes executed by representatives elected by voters. To begin to understand the outcomes of these political processes one must understand who votes (and who does not) and what the interests and priorities of the voting population are. Thereby, one may begin to understand the relative interests and priorities of the representatives that voters select and who create, recreate, and fund student financial aid programs.

The Current Population Survey offers a useful resource for examining the characteristics of voters in national elections. Table 7 summarizes voting rates by major demographic characteristics of the eligible adult population for the last seven presidential elections. Overall, the proportion of the adult population voting in these elections has declined substantially, from 69.3 percent in 1964 to 57.4 percent in 1988.

Of greater interest to this study are both the differences in voting rates among different demographic segments of the population (particularly by family income), and the changes in voting rates among these different population groups over time. In the 1988 election, for example, 43.4 percent of adults from the bottom quartile of the family income distribution voted, compared to 73.0 percent of those from the top quartile of the distribution. The magnitude of this difference must be quantified to be appreciated. There were 33.6 million potential voters in each family income quartile. From the lowest quartile--representing families with incomes from zero to $15,200--14.6 million votes were cast. From the second quartile, where family incomes ranges from $15,200 to $23,900, 18.4 million votes we e cast. From the third quartile, with family incomes between $23,900 and $39,800, 21.8 million votes were cast. From the top quartile, where family incomes ranged upwaid from $39,800, 24.5 million votes were cast. That is to say, there were about 9.9 million more voters with incomes over $39,800 than there were with incomes of less than $15,200, despite equivalent representation in the potential voting population. There were 13.4 million more votes from the top half of the family income distribution than there were from the bottom half (where financial aid to attend college is more important).

Overall between 1964 and 1988, the proportion of the adults who voted dropped by 11.9 percent. However, this drop-off was greater among lower income potential voters than it was among higher income potential voters. In the bottom half of the family income distribution, voting rates dropped by 12.4 percent, compared to a drop-off of 9.7 percent among voters from the top half of the family income distribution. These changes reflect a shift in voter participation, and hence representation, toward adults representing higher family incomes and corresponding interests between 1964 and 1988.

TABLE 7
Voting Rates in Presidential Elections
1964 to 1988

	1964	1968	1972	1976	1980	1984	1988	Change: 64-88
TOTAL	69.3%	67.8%	63.0%	59.2%	59.2%	59.9%	57.4%	-11.9%
Family Income								
Bottom Quartile	55.7	55.9	50.4	48.0	46.8	46.5	43.4	-12.3
Second Quartile	67.2	65.2	58.3	55.8	56.9	57.4	54.7	-12.5
Third Quartile	74.5	74.1	69.9	64.6		66.5	65.0	-9.5
Top Quartile	82.9	80.7	77.8	73.3		74.3	73.0	-9.9
Education								
0 to 8 Years	59.0	54.5	47.4	44.1	42.6	42.9	36.7	-22.3
1 to 3 Years High School	65.4	61.3	52.0	47.2	45.6	44.4	41.3	-24.1
4 Years High School	76.1	72.5	65.4	59.4	58.9	58.7	54.7	-21.4
1 to 3 Years College	82.1	78.4	74.9	68.1	67.2	67.5	64.5	-17.6
4 or More Years College	87.5	84.1	83.6	79.8	79.9	79.1	77.6	-9.9
Race/Ethnicity								
White	70.7	69.1	64.5	60.9	60.9	61.4	59.1	-11.6
Black	58.5	57.6	52.1	48.7	50.5	55.8	51.5	-7.0
Hispanic	---	---	37.5	31.8	29.9	32.6	28.8	
Gender								
Male	71.9	69.8	64.1	59.6	59.1	59.3	56.4	-15.5
Female	67.0	66.0	62.0	58.8	59.4	60.8	58.3	-8.7
Age								
18 to 20	39.2	33.6	48.3	38.0	35.7	36.7	33.2	-6.0
21 to 24	51.3	51.1	50.7	45.6	43.1	43.5	38.3	-13.0
25 to 44	69.0	66.6	62.7	58.7	58.7	58.4	54.0	-15.0
45 to 64	75.9	74.9	70.8	68.7	69.3	69.8	67.9	-8.0
65 and over	66.3	65.8	63.5	62.2	65.1	67.7	68.8	+2.5

Source: Current Population Reports, Series P-20.

The squeeze on voter incomes. While adults from middle and affluent family incomes vote at higher rates than do adults from low income backgrounds, these voters have made economic choices about their lives that affect their perceived need for financial aid to help pay the college attendance costs of their children. In this section we will show how Americans have made economic choices regarding savings and indebtedness that have left them less well prepared to finance the college educations of their children during the last decade than in prior decades.

The National Income and Product Accounts (NIPA) provide one useful way to analyze the economic condition of Americans. Data spanning more than five decades permit one to examine the the proportions of income Americans have saved, and the relationship of debt to their incomes. As savings decrease and debt mounts, Americans have created for themselves an increased dependency on financial aid to help pay college attendance costs.

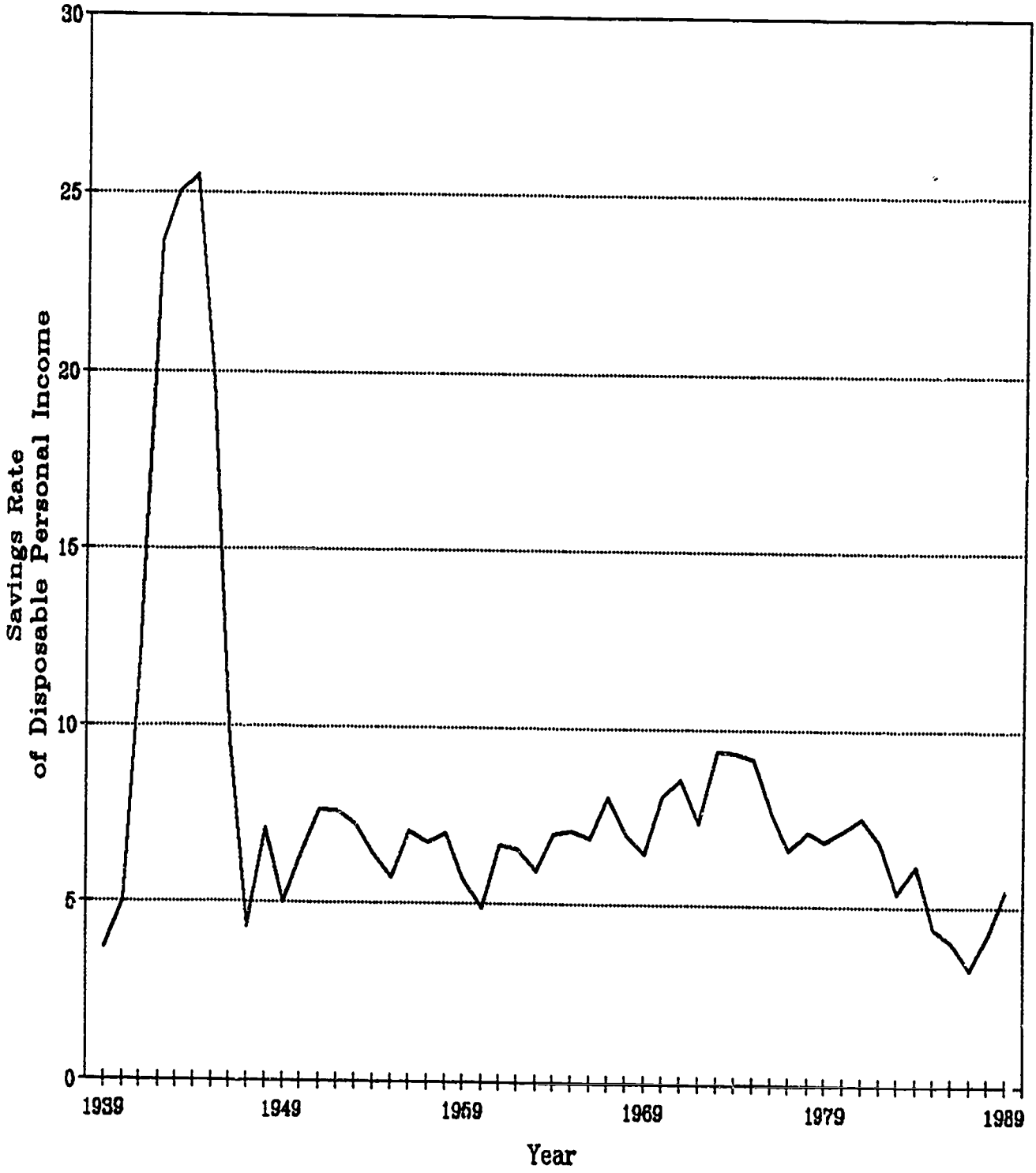
Figure 27 shows the proportion of Americans' disposable incomes devoted to savings for the last fifty years. During World War II, Americans committed about 25 percent of their disposable incomes to savings. After World War II and through the late 1960s, this share dropped into a range from 5 to 7 percent, then increased to about 9 percent during the mid 1970s. After 1975, however, the national savings rate entered a gradual decline that became a rapid decline after 1981. By 1987 the savings rate had declined to 3.25 percent--the lowest savings rate at any time during the last fifty years. By 1989 the savings rate had recovered partially to about 5 percent, a rate still below the national experience of the last five decades.

Figure 28 shows the ratio of consumer installment debt to disposable personal income for Americans between 1939 and 1989. Consumer installment debt goes to cover the purchase of such items as automobiles, appliances, etc. The trend is clear: consumer installment debt has grown much faster than income, from about 2 percent of disposable income at the end of World War II to about 19 percent for the last three years. In 1989 this ratio is higher than its ever been during the last fifty years. The installment payments on this debt have greatly eroded the remaining disposable income of Americans.

Finally, Figure 29 shows the ratio of mortgage debt to disposable personal income for the last two decades. Since 1970 mortgage debt has increased from about 66 percent of disposable personal income to about 94 percent, and by 1989 stood at a record high. Again, the payments on mortgage debt have reduced disposable personal income.

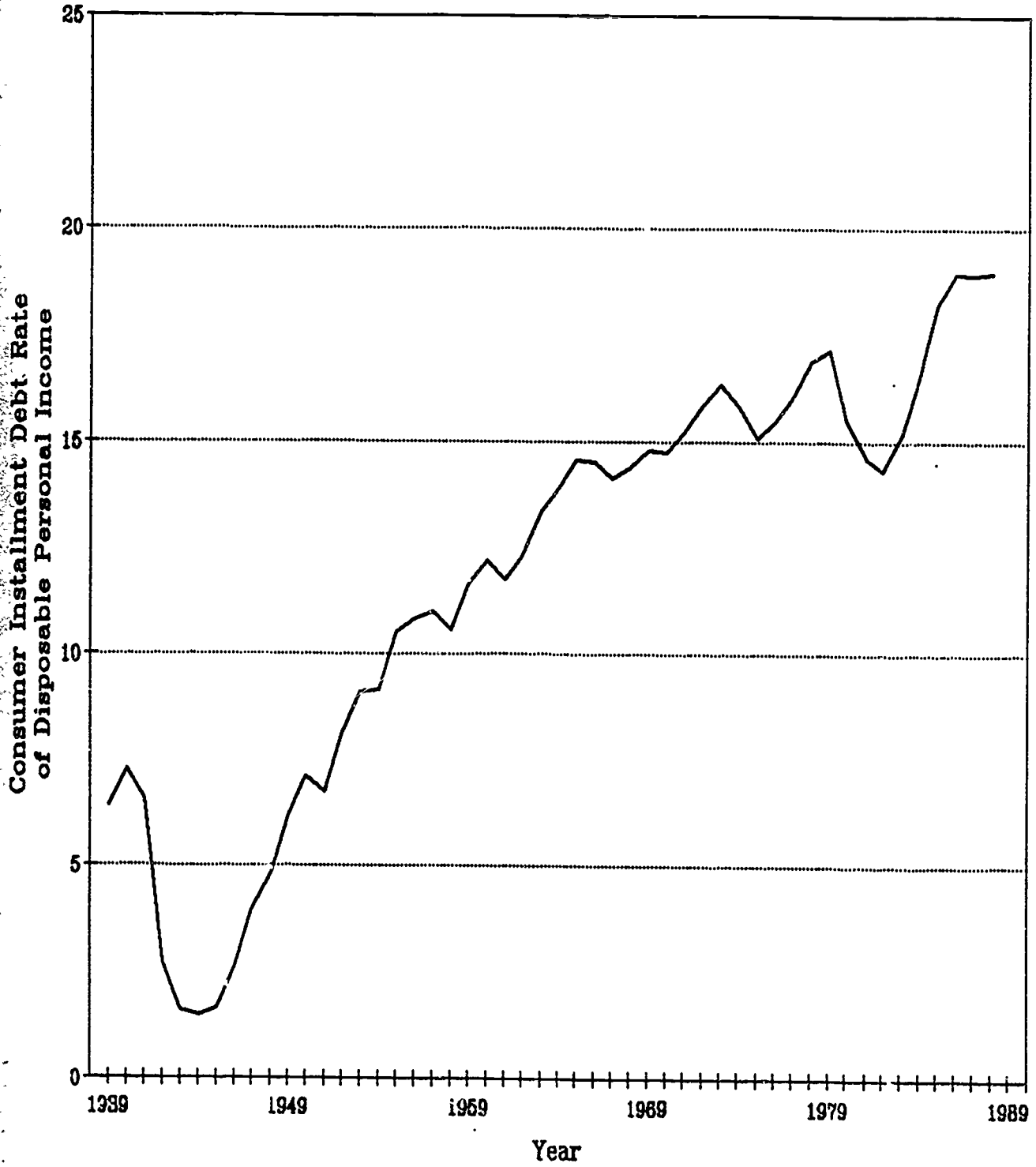
These three charts provide a plausible explanation for why Americans generally have greater need for financial aid programs than at any time in the past to help finance the college educations of their children. The savings rate is near an all-time low, and consumer installment and mortgage debt are at record highs. For many decades Americans have been spending more than they earned. In the process they have depleted their savings and borrowed against future incomes. When their children reach college age, families find themselves poorly prepared to finance the college educations from their savings and current and future incomes. Given the increasing educational requirements of the labor market, families clearly want to send their children to college to equip them for valuable labor market roles. But life-style choices regarding savings and

FIGURE 27
THE FAMILY FINANCIAL SQUEEZE
FROM SAVINGS
1939 TO 1989



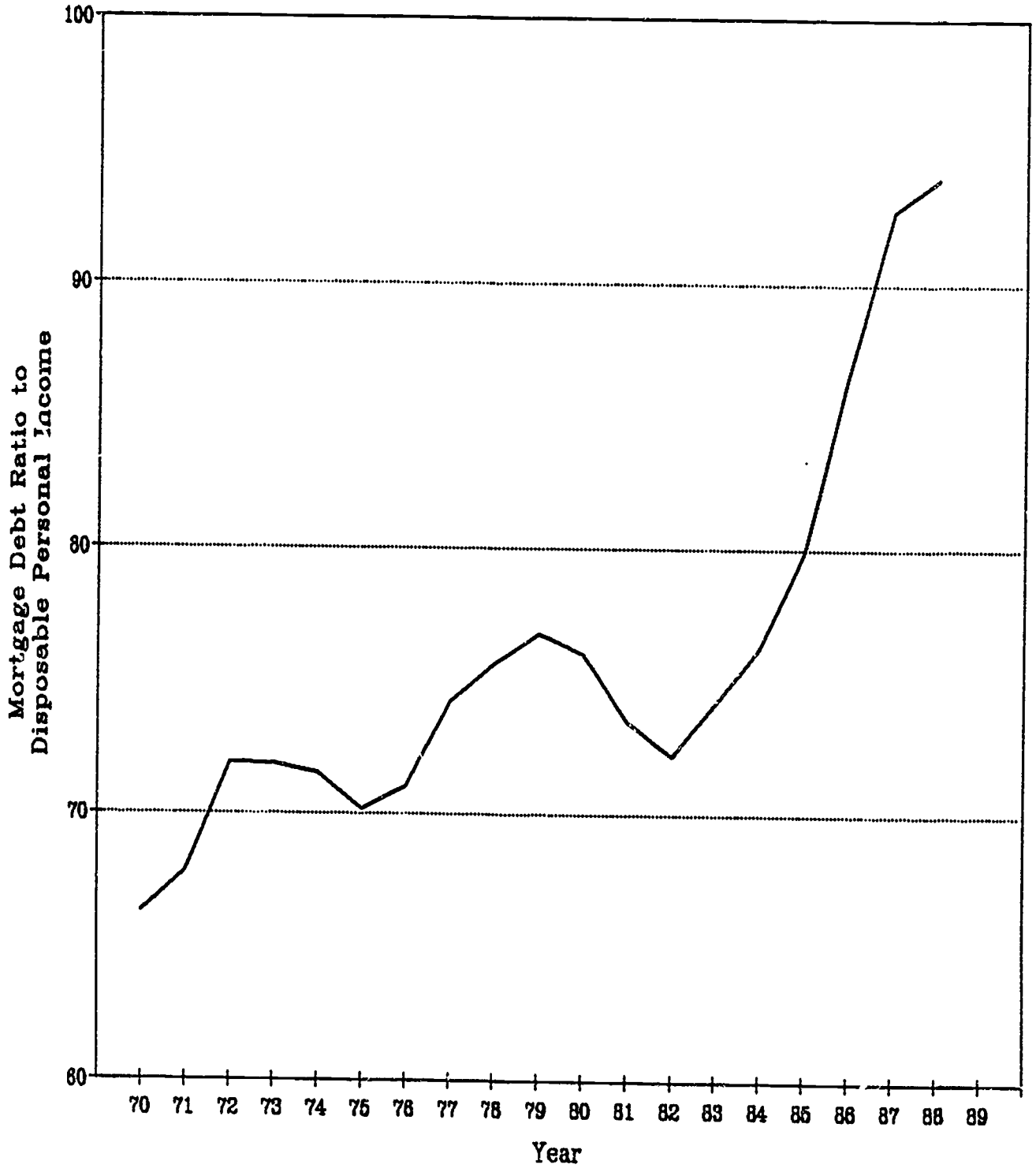
Source: National Income and Product Accounts.

FIGURE 28
THE FAMILY FINANCIAL SQUEEZE
FROM CONSUMER INSTALLMENT DEBT
1939 TO 1989



Source: National Income and Product Accounts.

FIGURE 29
THE FAMILY FINANCIAL SQUEEZE
FROM MORTAGE DEBT
1970 TO 1989



Source: National Income and Product Accounts.

borrowing made while the children were growing up in the family have left the parents poorly prepared financially to pay for their childrens' college educations from savings, current income, or future income through further debt. They feel they need help, they tell their elected representatives of their difficulties, and their representatives respond with changes to financial aid programs that appear to address their immediate needs.

The families that have not saved--the families that borrowed to finance consumer installment and mortgage debt--are the families with the highest voting rates in national congressional and presidential elections. They have chosen representatives whose positions reflect their concerns. These representatives in turn have made and remade governmental policies in ways that assure their re-election through responses to voter interests. The refocusing of student financial aid from low family income students to students from middle and high family income backgrounds can be viewed as a natural and inevitable result of this process.

Institutional Interests in Student Financial Aid

Institutions allocate their own grants and scholarships differently from the ways the federal and state governments allocate their funds as shown in Tables 5 and 6. While federal grant programs are focused on low income students, and state programs follow similar criteria, institutionally determined grants and scholarships appear to be skewed toward students from relatively high family income backgrounds. In the New York NPSAS study, for example, the median family income of Pell Grant recipients was $18,200, compared to $26,200 for New York state grant recipients, and $35,500 for recipients of institutional grants and scholarships.

To the extent institutions allocate their resources to meet organizational objectives, a budgetary interpretation of institutional priorities leads one to conclude that institutional financial aid objectives differ from the objectives of governmental student aid programs. Willie (1986) concluded her study of institutional aid awarding practices by noting that these objectives are multiple and not easily summarized. Student characteristics that appeared to be correlated with receipt and size of institutional aid awards were demonstrated financial need, academic merit, entering status, course load, gender, dependency status, and the receipt of a Pell Grant. The magnitude and direction of these relationships varied by institutional control and level.

Willie presented evidence that institutional financial aid was used as a tool to enhance institutional enrollment and revenues. At public four-year institutions, for example, the most important predictor for receiving aid for a given type of applicant was a low show-up rate among accepted applicants. Data limitations in her study did not permit extension of this analysis to institutions in other sectors.

Evidence from the National College Freshmen Norms indicates that institutional aid offers were a very important factor in college choice selection to about a fifth of college freshmen in 1989. The importance of this factor was greater in private institutions than in public institutions, and greater at four-year colleges than in universities or two-year colleges.

TABLE 8
Reasons Noted as Very Important in Selecting College of Enrollment
Fall, 1989

	All Inst	Universities Public	Universities Priv	4 Year Coll Public	4 Year Coll Priv	2 Year Colleges
Good academic reputation	52.8%	59.6%	77.3%	46.9%	61.1%	44.9%
Graduates get good jobs	43.7	45.0	57.4	39.4	47.6	41.6
Size of college	31.2	20.7	39.5	34.7	51.5	23.5
Graduates go to top grad schools	23.9	25.8	42.1	18.7	28.9	20.8
Offered financial assistance	22.8	15.9	29.9	23.8	35.5	18.7
Good social reputation	22.4	31.2	26.5	18.9	24.6	18.4
Low tuition	21.9	23.9	3.1	32.0	7.2	24.4
Offers special programs	20.3	17.8	20.5	19.3	23.4	20.5
Wanted to live near home	19.0	13.4	7.6	22.0	14.7	24.4

Source: The American Freshmen: National Norms for Fall, 1989.

The institutional purposes for financial aid generated from own revenue sources appear to be diverse and not always readily identifiable. Despite this ambiguity, one may easily conclude that institutional grants and scholarships have grown rapidly during the 1980s, and that these funds have not been used to offset the loss of purchasing power of federal grants directed toward low income populations.

V. Discussion

If we use the 1965 Higher Education Act and 1972 Education Amendments as reference points, we must conclude that the changes in student financial aid made since 1978 have redefined public policy toward financially needy students. The pervasiveness of the changes in federal, state, and institutional student aid programs and their consistency of direction over the last dozen years lead to the conclusion that the focus of student financial aid has shifted from the poorest students to students from more middle income and affluent family backgrounds. This refocusing of student financial aid from poor to middle income students is a reflection of political, social, and economic forces interacting to produce change.

Ultimately, we are left with one question:

> **Are we satisfied with the redirection and consequences of the federal, state, and institutional financial aid policies that have been pursued since 1978?**

In the remaining sections of this paper, I will try to identify some of these interactions as they influence the redesign of the student financial aid system.

Family Ability to Finance College Education

First, a juxtaposition of labor market demand/supply signals and escalating college costs have placed families in an increasingly difficult position regarding the choice and financing of higher education for their children. On the one hand, the labor market requires ever higher levels of educational attainment. Those who get that education are likely to succeed in the labor market, and those who do not are likely to experience a steadily eroding standard of living without prospect for improvement. Parents everywhere recognize the need for greater education for their children than they achieved themselves, and earnestly desire that their children have a solid chance at it for their futures. The labor market signals for ever higher levels of educational attainment have been especially strong in the 1980s.

Along with the rising labor market requirements for ever higher levels of educational attainment, college attendance costs have increased faster during the 1980s. In a real sense, over time families will feel that higher education is costing them more than it used to. They are correct in their perceptions if several fundamentals are ignored: 1) the comparatively modest college cost increases from the 1970s, and 2) the greater return on a college investment today than was the case a decade or two ago. In a comprehensive consideration of factors, however, these fundamentals cannot be ignored.

As labor market demands for collegiate education and college attendance costs have both risen faster than inflation, American family income growth has largely stagnated since the early 1970s. Some groups have experienced real gains in income, while others have experienced real losses. The dividing line between winners and losers appears to be the educational attainment of the head of the family.

For families whose incomes have not grown as fast as college attendance costs--hence greater than the cost of living--paying for college is more painful now than it was five or ten or twenty years ago. The labor market signals are

clear that greater educational attainment is required to experience a higher and increasing standard of living. Parents understand this relationship, but find it increasingly difficult to pay for the education of their children without external financial assistance. Politicians attuned to their voting constituencies hear this complaint and have responded by altering eligibility for financial aid programs they authorized and now fund.

The Role of Special Interests

The enterprise we know as "financial aid" consists of many players, each with distinct programs and goals that only overlap at providing financial resources to students to enroll in higher education. The distinct interests of the different parties must be clearly identified before one can hope to understand how the whole system "works."

A fundamental axiom of political budgetary analysis is: listen not to what politicians announce to be the goals of a program but look instead at who benefits from the program. While all in the financial aid enterprise profess service to students, in fact little else binds us to that common theme. In fact,

- politicians seek votes for re-election;
- lenders seek profits from making loans;
- colleges seek enrollments that maximize revenues and/or academic reputation;
- guarantors seek jobs;
- budget makers seek ways to stretch dollars; and
- students seek a way to finance college educations.

Only in the last item do we find a common ground for our commitment to financial aid for students.

While the above ought to be self-evident, in fact it helps explain the shift in financial aid policy from poor to middle income students since 1978. Middle income families vote at higher rates than do poor families, and thus politicians have responded to the constituency that elects them to office. Lenders, guarantors, secondary markets, and the associations that represent their interests are well financed and influential lobbyists before Congress, and their influence is magnified by the absence of equally well financed representatives of other programs such as the orginal constituency of the Pell Grant Program. Budget makers have been under extraordinary pressure during the 1980s to hold down program costs. The appeal of federally guaranteed student loans, where capital for student aid comes from private markets and is not directly represented in federal accounts, is inescapable. Colleges have entered the financial aid system aggressively during the 1980s, but not to offset the loss of purchasing power of aid for poor people but to compete with other colleges for middle income enrollments. Students from such families are, by and large, better prepared to undertake collegiate study; less costly to attract, teach, and retain; and more likely to enhance the academic reputation of the institution than are students from poor families.

This system of private interests overlapping only in the provision of financial aid to needy students is rational only in a short-term sense. It utterly fails the long-term public interest. Education--like any human capital investment, but unlike physical capital investments--requires an extraordinarily long gestation period. Two decades or more of intensive, expensive investment are required

before benefits are returned to the investor. In the United States, investments with relatively quick returns have been undertaken by the capitalist economy. Investments requiring long-term investment commitments and deferred benefits--such as human capital--have been the province of government. However, especially during the 1980s, the investment horizon of government has been drastically shortened. As governmental investment horizons have been foreshortened and become more like those of business, long-term human capital investment benefits have been sacrificed.

Family Willingness to Pay for College

The federal budget deficit is a creation of the federal government: revenues were reduced while spending programs continued. It is important to note that this deficit is a matter of deliberate actions and collective choice. The inevitable consequence of this choice is a deficit that disables the federal government from meeting established program commitments and undertaking new ones. The deficit could also become far worse should the economy enter a recession phase when revenues contract and obligations expand.

The American family is in a similar situation. During the 1980s American families chose to increase their expenses faster than they increased their incomes, and financed the difference through increased borrowing. According to the Federal Reserve System, consumer installment debt as a proportion of disposable personal income averaged about 18 percent between 1970 and 1983. Since 1984 it has averaged closer to 21 percent and in 1987--the last reported year--was at an all-time high of 21.5 percent and rising.

As consumption by American families has increased faster than incomes, the abilities of families to save for college diminishes. It is important to note that this is a matter of choice--current consumption over saving for future college expenses. Furthermore, when the time to send children to college arives, families are less able to make the sacrifices required to meet expected family contribution requirements determined through need analysis because of their increased debt. They have less discretionary income to pay college expenses for their children.

It is fair to conclude that families' willingness to make sacrifices for the college education of their children has diminished during the 1980s. At the same time, these families have lobbied Congress and others successfully for financial assistance to compensate for their own unwillingness to sacrifice for the college educations of their children. Congress has responded.

The above transference of family responsibilities for financing the college educations of their children to government is reflected in financial aid in other ways as well. By far the most significant example is the growth in independent students applying for financial aid. Of course these applicants are not independent or they would not be applying for financial assistance to pay college attendance costs. Rather, the more accurate description is that they seek to transfer their dependence from their parents to taxpayers generally. In financial aid we have struggled with guidelines to help determine when it would be acceptable to transfer financial dependence from parents to the government. This struggle continues because it is founded on weak logic and, for the same reason, probably never will be resolved.

But the more interesting question for financial aid is why so many people have deferred their collegiate enrollment into their late 20s. This question will be studied at ACT through a unique data file consisting of merged ACT assessment and financial aid applicant records. One of the hypotheses to be examined is whether those who defer their collegiate studies do so for financial reasons. We do not yet have the answer to this question, but will report it when we do.

Ultimately, we are left with one question:

Are we satisfied with the direction and consequences of the federal, state, and institutional financial aid policies that have been pursued since 1978?

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TABLE A-1
Changes in Pell Grant Eligibility at a Public Four-Year College for Sample Dependent and Independent Cases at Different Income Levels Between 1987-88 and 1988-89

Dependent Cases

1) Family size = 4, 1 in college

1986 Income	$0	$10K	$12K	$14K	$16K	$18K	$20K	$22K	$24K	$26K	$28K	$30K
87-88 Pell Grant	2100	2100	1950	1750	1550	13450	1150	950	650	350	0	0
88-89 Pell Grant	2190	2190	2050	1950	1750	1550	1350	1150	850	550	250	0
Change in Grant	+90	+90	+100	+200	+200	+200	+200	+200	+200	+200	+250	0

2) Family size = 4, 2 in college

1986 Income	$0	$8K	$12K	$16K	$20K	$24K	$28K	$32K	$36K	$40K
87-88 Pell Grant	2100	2100	1950	1750	1450	1050	650	0	0	0
88-89 Pell Grant	2190	2190	2150	1950	1750	1550	1250	850	450	0
Change in Grant	+90	+90	+200	+200	+300	+500	+600	+850	+450	0

Independent Cases

3) Family size = 1

1986 Income	$0	$4K	$6K	$7K	$8K	$9K
87-88 Pell Grant	2100	2100	1750	1050	450	0
88-89 Pell Grant	2190	2190	1950	1350	750	0
Change in Grant	+90	+90	+200	+300	+300	0

4) Family size = 2, married, no children, 1 in college

1986 Income	$0	$6K	$7K	$8K	$9K	$10K	$11K	$12K	$13K	$14K	$15K	$16K
87-88 Pell Grant	2100	2100	2050	1750	1550	1350	1150	950	650	450	250	0
88-89 Pell Grant	2190	2190	2150	1550	850	250	0	0	0	0	0	0
Change in Grant	+90	+90	+100	-200	-700	-1100	-1150	-950	-650	-450	-250	0

5) Family size = 3, married, one child, 1 in college

1986 Income	$0	$8K	$10K	$12K	$14K	$16K	$18K	$20K	$22K	$24K	$26K	$28K
87-88 Pell Grant	2100	2100	1650	1250	850	350	0	0	0	0	0	0
88-89 Pell Grant	2190	2190	2050	1850	1650	1450	1250	1050	750	550	250	0
Change in Grant	+90	+90	+400	+600	+800	+1100	+1250	+1050	+750	+550	+250	0

6) Not married, 1 child, other in college

1986 Income	$0	$8K	$10K	$12K	$14K	$16K	$18K	$20K	$22K	$24K	$26K	$28K
87-88 Pell Grant	2100	2100	1750	1350	950	550	0	0	0	0	0	0
88-89 Pell Grant	2200	2200	2150	1950	1750	1550	1350	1150	850	650	350	0
Change in Grant	+100	+100	+400	+600	+800	+1000	+1350	+1150	+850	+650	+350	0

TABLE A-2

Family Income Quartile Definitions
For Unmarried 18 to 24 Year Old High School Graduates
1970-1988

	Bottom Quartile	Second Quartile	Third Quartile
1970	$7,157	$10,875	*
1971	7,356	11,461	*
1972	7,721	12,258	*
1973	8,531	13,209	*
1974	9,044	14,209	21,191
1975	9,553	14,952	22,151
1976	9,972	16,083	23,793
1977	10,614	17,411	*
1978	11,477	19,271	*
1979	12,679	21,270	*
1980	13,214	22,415	*
1981	13,921	23,820	*
1982	14,857	26,773	*
1983	15,086	27,265	*
1984	15,991	28,525	*
1985	16,967	30,978	46,755
1986	16,954	31,316	48,112
1987	17,451	32,397	51,332
1988	19,667	34,904	55,871

*Not possible to calculate

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