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Demographic Aspects of the Distribution of Income Among Families: Recent Trends in the United States

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CENTER DISCUSSION PAPER NO. 165

DEMOGRAPHIC ASPECTS OF THE DISTRIBUTION
OF INCOME AMONG FAMILIES: RECENT TRENDS
IN THE UNITED STATES

Simon Kuznets

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Simon Kuznets

Distribution of income among families is the dominant component of the size distribution of income among a country's population. As of March, 1969, the family distribution accounted for 184 million persons out of a total population of the United States of 203 million--the rest being unattached persons and the institutional population.¹ And if families are defined, as they are in the basic source used here, as "a group of two or more persons related by blood, marriage, or adoption, and residing together" (see S-II, p. 6), they are the units that make most decisions relating to search for employment and for other sources of income and on the disposition of income received--and are thus the relevant recipient unit in the analysis of the size distribution of income. But this means that differences and changes in the structure of family units have direct bearing upon the income distribution.

This paper deals with changes in a few demographic characteristics of family units, and their bearing on the distribution of money

¹For the total number of persons in families see U.S. Bureau of the Census, Current Population Reports, Series P-60, no. 66 (Washington, 1969), Table 13, p. 35 (referred to below as S-II). For total population of the United States (average of that on March 1 and April 1, 1969) see Statistical Abstract of the United States, 1969 (Washington, 1969), Table 2, p. 5.

income among families in the United States since 1947. To this end we used the results of an annual current survey of family income. While deficient in the exclusion of non-money income (the two important types are farm products retained for own consumption, and income from owner-occupied dwellings), and while short in its coverage of money income, the survey provides a great deal of information on the demographic and labor force characteristics of family heads and of some of the members of the families.¹ For our purpose, that of illustrating the increasing

¹The total money income of the family, as defined in the data, is the sum of money wages and salaries, net income from self-employment, and income other than earnings--summed for all income recipients in the family. The amounts cover gross income before deductions for personal taxes, Social Security, and the like. Income other than earnings includes not only the usual property incomes (dividends, interest, net rental income, royalties, income from trusts and estates) but also public assistance and welfare payments, unemployment compensation, government pensions and veterans' payments, private pensions, annuities, alimony, regular contributions from persons not living in the household, and a variety of transfers. The only receipts remotely resembling income, that are excluded, are gifts and tax refunds, as well as receipts and gains from sale of property (unless the person is engaged in the business, in which case it is recorded under net income from self-employment).

"It is estimated that the income surveys conducted by the Bureau of the Census during the past few years obtained about 87 percent of the comparable total money income aggregates and about 95 percent of the comparable money wage or salary aggregates included in the personal income series prepared by the Office of Business Economics" (S-II, p. 10). For a similar comparison with the national income accounts series on personal income see also S-I, p. 41, which shows somewhat higher percentages of coverage.

A reader interested in a more detailed appraisal of the data will find a discussion in the basic sources S-I and S-II referred to in the notes to the tables; and also in Joint Committee Print, 88th Congress, 2nd Session, The Distribution of Personal Income (prepared for the Subcommittee on Economic Statistics of the Joint Economic Committee, Washington, 1965), in particular, Chapter III, Section B, pp. 58-72.

importance within the family income distribution of certain distinctive demographic groups among the families, the data--despite their shortcomings--are adequate.

1. The Three Selected Family Subgroups

Three groups among families distinguished by the age and sex of their head are of particular interest here: those with a relatively young head; those with a relatively old head; and those with a female head. Given the data, the more specific definitions are: families with all heads under the age of 25 (listed in the data as 14 through 24); families with all heads aged 65 and over; families with female heads aged 25 through 64. This leaves a residual fourth category--families with male heads aged 25 through 64. Table 1 summarizes the characteristics of these family subgroups that are easily derived from the data--and they suggest why this particular classification is of bearing on the income distribution among families (and hence total size distribution of income).

By definition, a family can have only one head. And while the source defines as head "the person regarded as the head by the members of the family" (S-II, p. 7), it is clear that the term relates to the person whose contribution to family income is major, whatever weight he or she carries in decisions on uses of income. One should note also that "women are not classified as heads if their husbands are resident members of the family at the time of survey" (ibid., p. 7); and that married couples related to the head of the family and living within

Table 1 Selected Demographic Characteristics of Families,
United States, 1968 (unless otherwise indicated)

	<u>Age and Sex of Head</u>					All, Female (6)
	Total (1)	All, age below 25 (2)	All, age 65+ (3)	Female, age 25-64 (4)	Male, age 25-64 (5)	
<u>Numbers and Income</u>						
1. Number of families (total in million) and percentage share	50.51	6.6	14.0	7.9	71.5	10.8
2. Families with female heads, % of those in line 1	10.8	9.6	16.1	100	0	100
3. Money income per family, arithmetic mean, thousand \$	9.67	6.43	6.21	5.63	11.08	5.55
<u>Race (% shares of all families)</u>						
4. White	90.0	88.5	92.1	72.1	91.6	74.5
5. Negro	9.0	11.1	7.4	26.6	7.5	24.4
<u>Size-of-Family Groups (% shares)</u>						
6. 2 persons	34.4	45.8	77.5	37.7	24.6	45.7
7. 3 persons	20.8	37.7	14.4	24.5	20.8	22.7
8. 4 and more persons	44.8	20.5	8.1	37.8	54.6	31.6
9. Average number of persons per family	3.64	3.05	2.40	3.45	3.96	3.24
10. Money income per person, thousand \$, line 3/line 9	2.66	2.11	2.59	1.63	2.80	1.72
<u>Proportion with own children under 18</u>						
11. % of families	55.8	57.5	3.3	64.8	65.0	52.8

Table 1 (continued)

	(1)	(2)	(3)	(4)	(5)	(6)
<u>Shares of Families by Age and Sex of Head, Nonfarm and Farm</u> (1962-64, totals in column 1 in millions)						
12. Nonfarm	44.29	6.0	13.9	na	na	10.6
13. Farm	3.13	2.7	19.6	na	na	5.7
<u>Labor Force Participation Ratios (%), Male Only</u>						
	1950 (1)	1960 (2)	1960 (3)	1965 (4)		
14. Aged 20-24	81.9	86.1	88.9	86.2		
15. Aged 65 and over	41.4	30.5	32.2	26.9		

Notes

Lines 1-3: Calculated from Bureau of the Census, Current Population Reports, Series P-60, no. 66, Income in 1968 of Families and Persons in the United States (Washington, 1969) (referred to below as S-II), Table 15, pp. 42-43.

Lines 4-5: Calculated from S-II, Table 12, pp. 30-34. The shares do not add to 100, because of the contribution of other nonwhite races.

Lines 6-9: Calculated from S-II, Table 13, p. 35. The average number for families with 4 or more persons, as derived from this table in the source, is 5.2. This average was applied to the entries in line 8 (and 2 and 3 to the entries in lines 6 and 7, respectively) to calculate the average in line 9. Lines 6-8 are from S-II, Table 15, pp. 42-43.

Line 11: Calculated from S-II, Table 16, pp. 44-45.

Lines 12-13: Calculated from Bureau of the Census, Technical Paper no. 17, Trends in the Income of Families and Persons in the United States, 1947-1964, by Mary F. Henson (Washington, 1967, referred to below as S-I), Tables 2 and 3, pp. 51-62. The shares were calculated from arithmetic means of the numbers of families for the three years, 1962 through 1964.

Lines 14-15, columns 1 and 2: From Bureau of the Census, Historical Statistics of the United States (Washington, 1960), Series D-15, D-16, and D-19, census data, p. 71, and Historical Statistics of the United States, Continuation to 1962 and Revisions (Washington, 1965), p. 13. The ratios relate to the United States excluding Hawaii and Alaska.

Lines 14-15, columns 3-4: From Bureau of the Census, Statistical Abstract of The United States, 1969 (Washington 1969), Table 303, p.212. Includes Hawaii and Alaska.

the family are included in the head's family and not treated as separate units. It is the implied importance of the characteristics of the head as the main source of family income that warrants the grouping distinguished in Table 1. Some of the associated characteristics may now be noted.

First, the three groups, with young heads, old heads, and female heads aged 25-64, accounted together for well over a quarter of the total number of families in 1968. As expected, the income per family for each of these three groups was clearly below the countrywide average--by proportions ranging from about 33 percent for the group with the young heads to over 40 percent for the families with female heads (either aged 25-64, or of all ages). Obviously, the position of the young head at the very beginning of the life cycle of earnings and of the old head past the phase of full engagement, and the distinctive disadvantage of the female head as an income provider (in a family without a male head) result in lower family income levels; and contribute significantly to income inequality among families in the customary size distribution.

Second, one should note the large proportion of Negroes in the group with female heads--about a quarter compared with the countrywide ratio of Negro heads in the total of only 9 percent (lines 4-5), pointing to the greater prevalence of "broken" family units among Negroes than among the whites. It also contributes to reducing the per family income among families with female heads, although the average income even among the families with white female heads is still distinctly below the countrywide average (the arithmetic mean income for families

with white female heads aged 25 through 64 is \$6.42 thousand in 1968; for families with white female heads, all ages, \$6.09 thousand; see S-II, Table 12, pp. 28-34).

Third, while the three groups are sub-average with respect to income per family, two of the groups are also characterized by a smaller size of family (lines 6-11). The families with young heads average somewhat over 3 persons per family, about two-tenths below the countrywide average family; and for families with heads over 65 years of age, the average number is only 2.4 persons. Only the families with female heads, while still of somewhat smaller size, are fairly close to the average. There are similar differentials in the proportion of families with own children under 18, particularly distinctive for the families with heads over 65 years of age (line 11). While it is not fully justifiable to divide the average income per family by the average number of persons in the family, if only because not all persons are of the same weight as consuming units, the results in line 10 suggest that the three distinguished are still characterized by lower than average income per person--although the shortfall from the countrywide average is quite small for the families with heads aged 65 and over.

Fourth, the distinction between farm and nonfarm (lines 12-13) reveals that the families with young or female heads are far less common among the farm than among the nonfarm families. On the other hand, the proportion of families with head aged 65 and over is distinctly higher among the farm than among the nonfarm families (close to 20 as compared with 14 percent). And yet even here the greater weight given

to this group with sub-average income is reduced in importance by the finding that for farm families, the per family income for families with heads aged 65 and over was (in 1962-64) as high as 77 percent of the per family income for all farm families; whereas the average income of the same group among the nonfarm families was less than 70 percent of that for all nonfarm families (for 1959-61 the corresponding relatives were 85 percent for the farm families and less than 70 percent for the nonfarm group; see S-I, Table 25, pp. 182-87).

Fifth, the extent of participation in the labor force must clearly differ between male and female heads of families; and among males, between the young and the very old heads, on the one hand, and those aged 25 through 64 on the other. The differences can be illustrated, however, only for male heads; and even for the latter, the labor force participation rates shown in lines 14-15 cannot be applied directly to males of heads of families, since not all males within a given age class can be presumed to be heads of families. However, if we assume that almost all male heads of families in the young group are in the ages of 20 through 24, the ratio of heads among the latter for 1968 is roughly 41 percent; whereas the ratio of family heads aged 65 and over to all males aged 65 and over is roughly 73 percent.¹ These figures

¹The percentages are derived by comparing the absolute numbers of male heads aged below 25 in 1968 with the absolute numbers of all males aged 20-24 in the same year; and of male heads aged 65 and over with all males aged 65 and over in 1968. The data on male heads of families by age are from S-II, Table 15, pp. 42-43; those on all males by age for mid-1968 are from the Statistical Abstract of the United States, 1969 (Washington, 1969), Table 8, p. 10.

suggest that the high labor force participation rates among all males aged 20-24, between 80 and 90 percent, would tend to be true also of the young male heads of families; and that the relatively low labor force participation rates among all males aged 65 and over, between 40 and 27 percent, and rapidly declining, would tend to be true also of the old heads of families.

2. Trends in Shares of Selected Family Groups Within Ordinal Divisions of the Family Distribution by Money Income

(a) The Findings

Given the three selected sub-average-income family groups and their associated characteristics noted for 1968, the question of most interest here is as to the changing importance of these groups within the total family distribution (and hence within the total size-of-income distribution); and the possible effects of any trends in the shares of these groups upon changes in income inequality as shown by the size distribution of money income among all families.

Table 2 summarizes the data on the shares of the three subgroups within the ordinal divisions in the distribution of all families by money income, for some two decades extending from 1947 to 1968. We also added data on the shares, within ordinal divisions, of family heads who were not members of the labor force; and of the average number of persons per family--because of the close association between these characteristics, the low levels of labor force participation among the family heads aged 65 and over and among female heads of families, and the relatively small size of families among those with

Table 2 Changes in Selected Aspects of Family Structure, Within Ordinal Groups in the Distribution by Family Money Income, United States, 1947-68

	Ordinal Groups						All Families	Income per family, relative to income of all families
	Lowest Fifth	Second Fifth	Middle Fifth	Fourth Fifth	Top 80 to 95%	Top 5%		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<u>Families, Head Aged Below 25, % Shares</u>								
1. 1947-52	6.2	8.1	5.7	4.0	1.9	0.3	5.1	0.725
2. 1953-58	6.5	8.3	5.5	3.4	1.7	0.3	5.0	0.717
3. 1959-61	7.8	8.9	5.7	3.5	1.4	0.3	5.4	0.672
4. 1962-64	8.9	9.2	6.4	3.6	1.2	0.2	5.8	0.657
5. 1968	10.4	10.4	7.1	3.8	1.3	0.1	6.6	0.665
<u>Families, Head Aged 65+, % Shares</u>								
6. 1947-52	27.7	11.8	7.1	6.1	7.0	10.5	12.1	0.748
7. 1953-58	31.2	13.5	7.3	5.7	6.6	8.9	13.0	0.698
8. 1959-61	32.4	15.3	7.4	6.1	5.8	10.0	13.6	0.700
9. 1962-64	34.1	16.2	7.9	6.2	6.4	9.7	14.3	0.694
10. 1968	35.2	15.8	8.1	5.6	5.4	5.9	14.0	0.644
<u>Families, Female Heads Aged 25-64 (Lines 11-14 estimated)</u>								
11. 1947-52	14.2	7.2	5.3	4.1	4.9	3.4	7.1	0.694
12. 1953-58	15.5	7.6	5.0	3.8	3.8	2.8	7.1	0.642
13. 1959-61	16.6	8.2	4.9	3.6	2.9	1.9	7.2	0.592
14. 1962-64	17.4	8.5	5.0	3.4	3.1	2.7	7.5	0.596
15. 1968	19.6	9.4	4.7	3.5	2.5	1.8	7.9	0.574

Table 2 (continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<u>Total of the Three Family Groups Above</u>								
16. 1947-52	48.1	27.1	18.1	14.2	13.8	14.2	24.2	0.726
17. 1953-58	53.2	29.4	17.8	12.9	12.1	12.0	25.1	0.686
18. 1959-61	56.8	32.4	18.0	13.2	10.1	12.2	26.2	0.665
19. 1962-64	60.4	33.9	19.3	13.2	10.7	12.6	27.6	0.660
20. 1968	65.2	35.6	19.9	12.9	9.3	7.8	28.5	0.629

Families, Head not in Labor Force (inc. members of Armed Forces, living on post or with their families off post)

21. 1947-51	31.4	13.6	8.2	7.0	7.3	5.9	13.4	0.661
22. 1953-58	40.2	16.8	9.1	6.6	6.6	6.3	15.8	0.615
23. 1959-61	43.8	20.0	9.6	6.8	6.6	7.0	17.4	0.609
24. 1962-64	46.7	21.2	9.9	7.2	6.8	6.9	18.4	0.603
25. 1968	50.4	21.2	10.8	6.9	5.8	5.3	19.0	0.577

Average Number of Persons per Family

(Column 8 shows sum of absolute deviations, signs disregarded, of the average within each ordinal group, the groups properly weighted, from the average for all families)

26. 1947-52	3.27	3.55	3.63	3.66	3.86	4.08	3.60	0.157
27. 1955-58	3.36	3.67	3.83	3.82	3.83	4.01	3.71	0.157
28. 1959-61	3.30	3.67	3.87	3.87	3.89	4.00	3.73	0.192
29. 1962-64	3.30	3.69	3.91	3.98	3.94	4.07	3.77	0.220
30. 1968	3.16	3.55	3.77	3.94	4.01	4.07	3.69	0.267

Persons per Family, 1947-52 and 1968, Estimated from the 1968 Averages for the Four Family Subgroups (Table 1, line 9, cols 2-5 and Percentage Shares of the Subgroups in Lines 1,5,6,10,11,15, Above (column headings as for lines 26-30))

31. 1947-52	3.40	3.67	3.77	3.81	3.81	3.78	3.69	0.125
32. 1968	3.21	3.57	3.75-	3.82	3.85+	3.86	3.64	0.201

Table 2 (continued)

Notes

Lines 1-4, 16-19, and 21-24, columns 1-7: Taken directly or calculated from S-I (see notes to Table 1), Tables A and C, pp. 3-14, and 20-31. These tables contain annual series, 1947 through 1964, showing the percentage shares of family groups distinguished by age of head, or by sex of head, or by non-participation of head in labor force (except 1952), totals and within each ordinal group. The entries here are arithmetic means of these shares for the periods shown in the stub. The shares for the top 80-95 percent group were derived from those shown for the top fifth and the top 5 percent.

Lines 11-14, columns 1-7: S-I does not provide a breakdown of families with female heads by age of head. We use the relation for 1968 of female heads, aged 25-64, to female heads of all ages, within each ordinal group, to approximate the entries in lines 11-14, columns 1-6 (the ratios for 1968 of female heads, aged 25-64 to all female heads, were 0.7 within the lowest and second fifth; and roughly 0.8 within the other ordinal groups). The combined percentage share in column 7 was then derived from the percentage shares within the ordinal groups properly weighted (to allow for the difference in weight between columns 1-4 and 5 and 6).

Lines 1-4, 6-9, 11-14, 16-19, and 21-24, column 8: Taken directly or calculated from S-I, Tables 24, 25, and 29, pp. 176-87 and 200-204. These tables show the annual arithmetic mean income per family for groups of families distinguished either by age of head, or sex of head, or the head's non-participation in the labor force. These average incomes, in current prices, were then averaged for the periods indicated in the stub (logarithmic means), and converted to ratios of the average income per family for all families.

For families with female heads aged 25-64 we assumed an average income per family identical with that of all families with female heads (the only relevant average available). This assumption seemed justified since for 1968 the two average incomes were less than 2 percent apart (see Table 1, line 3, column 4 compared with column 6).

Lines 16-20, column 8: Calculated from lines 1-15, column 8, by weighting the income relative for each of the three groups by the shares in the total of all families shown in column 7 (and dividing by the sum of these shares shown in column 7, lines 16-20).

Lines 5, 10, 15, and 25: Taken directly or calculated from S-II. The entries in columns 7 and 8 were taken directly from the relevant tables. For shares within ordinal groups (columns 1-6), not shown for 1968 in the manner in which they were given in Table C of S-I for the earlier years, estimates had to be made. These were based on the distributions of families by eighteen detailed family money income brackets, shown for all families, and for families distinguished by age, sex, and labor

Table 2 (continued)

Notes (concluded)

force status of the head (Table 15, pp. 42-43, for age and sex of head groups; and Table 23, p. 59, for families with head not in labor force). From these frequency distributions by eighteen income brackets, the shares of the selected age, sex, and labor force status of head subgroups were calculated, corresponding to the ordinal groups within the total family income distribution (by arithmetic interpolation, to preserve the additivity of the percentage shares to 100).

Lines 26-29, columns 1-7: Calculated from S-I, Tables A and C. These tables show the percentage shares of families with 2, 3, and up to 7 and over persons, within each ordinal group and for all families, annually, for 1947 through 1952, and 1955 through 1964. Arithmetic means of these shares, for the ordinal groups and for the total of all families, were calculated for the periods shown in the stub; and the average number of persons was computed, setting the average for the group of 7 persons and over at 9 persons (this estimate corresponds to the average shown for that group in 1968; see S-II, Table 13, p. 35). With this calculation made for columns 1-6, column 7 was derived as a weighted mean of the averages in columns 1-6.

Line 30, columns 1-6: Here, as in the case of all estimates for 1968, the shares within the ordinal groups had to be calculated from the tables showing the distribution by eighteen income brackets and the grouping of families by size corresponding to each income bracket (Table 13, p. 35 in S-II). The average in column 7 was derived as a weighted mean of the averages obtained for the six ordinal groups in columns 1-6. For all families, the mean, 3.69, is slightly larger than that shown in the source (3.64), but we retained it for consistency with the means within the ordinal groups.

Lines 26-30, column 8: A sum of absolute deviations of the averages within the ordinal groups (columns 1-6) from the average for the distribution of all families in column 7, the deviations weighted to allow for the lower weight of the ordinal groups in columns 5 and 6. The summation is, of course, disregarding the signs of the deviations.

Lines 31-32: The averages in columns 1-6 were obtained by weighting the averages for the four subgroups (young, old, female heads, and male heads aged 25-64) in line 9 of Table 1 (for 1968) by the percentage shares of these four groups in this table--for 1947-52 and 1968. The over-all average in column 7 is derived from the averages in columns 1-6, appropriately weighted. The average deviation in column 8 is calculated in the same manner as that in lines 26-30.

very young heads or heads aged 65 and over.

The first major finding suggested by Table 2 is that over the two decade period, covering most of the post-World War II years, the shares of the three selected family subgroups in the total of all families all rose: the share of families with young heads rose from 5 to over 6.5 percent of all families; that of families with heads aged 65 and over, from 12 to 14 percent; and that of families with female heads aged 25 to 64, from 7 to almost 8 percent (column 7, lines 1 and 5, 6 and 10, 11 and 15). For the total of the three subgroups, the combined share rose from about 24.2 to 28.5 percent (column 7, lines 16 and 20), a substantial rise over a relatively short period. The preliminary data for 1969 indicate that the rise continued for one of the groups distinguished here; in 1969 the proportion of families with young heads was 6.9 percent, a rise from 6.6 in 1968; but that of families with old heads declined slightly to 13.8 percent (from 14.0 percent in 1968; no data were given for families with female heads).¹

Perhaps partly because of the rise in the proportions of families with head aged 65 and over and with female heads, partly because of a decline in the labor force participation rates among the old family heads (indicated in Table 1, line 15), there was also a marked rise in the proportions, in the total of all families, of those with head not

¹See U.S. Bureau of the Census, Current Population Reports, Series P-60, no. 70 (Washington, July 1970), Table 1, p. 3.

in the labor force--from about 13.5 percent in 1947-51 to 19 percent in 1968 (column 7, lines 21 and 25). With only one million members of the Armed Forces included in this subgroup in 1968 (see S-II, p. 4), and not all of them heads of families, and over 9.5 million of all heads not members of the labor force (see S-II, Table 23, p. 59), it is doubtful that any increase in the Armed Forces component contributed much to this rise in the share of families with heads not in the labor force.

The increase in the proportions of families with quite young and relatively old heads, all other conditions being equal, should have made for a decline in the average number of persons per family--since these two family subgroups are characterized by a lower than average size of family (see Table 1, line 9). But Table 2 shows that the average number of persons per family rose, at least through 1962-64; and while declining slightly thereafter, was still above the 1947-52 average in 1968 (see column 7, lines 26-30). Apparently the other conditions did not remain equal; and the higher birth rate that marked the period, reaching a peak in the late 1950's, must have contributed to a slight rise in the average size of the family unit.

We can now turn to the movements, even more significant for our purposes, in the shares of the selected family subgroups within the ordinal divisions. And here there is a marked set of trends similar in all three subgroups: the proportions of these subgroups, of the families with young heads, or old heads, or female heads (aged 25-64, but presumably also female heads of all ages), within the lower ordinal

divisions rose, and rose much more than their proportions in the total of all families; whereas the shares within the upper ordinal divisions either declined, or rose much less than they did in the total of all families. Thus, the shares of families with young heads within the lowest fifth rose from 6.2 percent in 1947-52 to 10.4 percent in 1968, a rise of some seven tenths--while it rose from 5.1 to 6.6 percent of all families, a rise of less than a third. And similar comparisons can be made for the shares of families with old or female heads.

With families with young, old, and female heads conspicuously drifting over the period downward within the family income distribution, i.e., toward the lower ordinal divisions, the average income per family within these three subgroups, while below the average for all families throughout the period, naturally declined in proportion to that average. Column 7, lines 1-5, 6-10, and 11-15, reveals that the relative income per family, relative to per family income for all families, declined: for families with young heads, from about 73 percent in 1947-52 to about 66 percent in 1968; for families with old heads, from 75 percent at the earlier date to 64 percent in 1968; and for families with female heads, from 69 percent in 1947-52 to 57 percent in 1968. For the three groups combined, the per family income relative dropped from 73 percent in 1947-52 to 63 percent in 1968 (lines 16 and 20, column 7).

The downward drift within the income distribution of the families with heads aged 65 and over, and with female heads, presumably contributed heavily to a similar set of trends in families with the head

not in the labor force (columns 1-6, lines 21-25). The rise in the share of this group was particularly striking within the two lower fifths (columns 1-2), compared with their significant decline within the top 80 to 95 and the top 5 percent (columns 5-6). And correspondingly the income relative for this group dropped from 66 percent in 1947-51 to 58 percent in 1968 (column 7, lines 21 and 25).

We noted that the average number of persons per family failed to decline over the period---despite the rise in the shares of families with very young and very old heads. But even here the downward drift of these two family subgroups meant that, after a while, the average size of the family in the low ordinal divisions tended to drop whereas the average size of the family in the higher ordinal divisions tended to rise. This difference in trends in family size among ordinal divisions, which emerges after 1955-58, can be observed in columns 1 and 2 for the lower ordinal divisions, and columns 4-6 for the higher divisions (lines 26 and 27, compared with lines 29-30). This difference results in a widening of the disparity in size of family among the ordinal divisions, shown in column 7--the over-all measure of disparity rising from 0.16 in 1955-58 to 0.27 in 1968.

Lines 31-32 of the table show that differences among the four family subgroups distinguished by age and sex of head in their shares within ordinal divisions contributed heavily to differences in average size of family between the lower and upper ordinal divisions. Both in 1947-52 and in 1968, the estimate reflecting inter-family-subgroup differences in both family size and shares within the several fifths accounts for between one-half and seven-tenths of the total ranges of

differences in family size among the ordinal divisions in the family distribution (0.38 points out of 0.81 in 1947-52 and 0.65 points out of 0.91 in 1968. Compare the difference between column 6 and 1 in line 31 with that between the same columns in line 26; and likewise for the differences between the same columns in lines 32 and 30). This effect of differences among the four family subgroups in their shares and family size is particularly conspicuous in the movement from the lower to the middle fifths. Even of greater interest is the fact that the downward drift of the three selected family subgroups contributed markedly to the widening divergence among the ordinal divisions with respect to average family size; of the 0.110 points of rise in the average deviation in the total distribution between 1947-52 and 1968 (see column 8, lines 26 and 30), the shifting weight of the three family subgroups contributed 0.076 points (see column 8, lines 31 and 32), or about seven-tenths.

(b) Explanatory Suggestions

Why did the proportions of families with young, old, and female heads rise, and why did their income relative to that of all families decline? No tested answers can be provided within the limits of this paper; but some exploration, with the help of data easily at hand, would be of interest, if only to permit us to glimpse the more general implications of the effects of these trends upon inequality within the total family distribution as usually measured.

The rise in the proportion of families with heads 65 years of age

and over, and partly also of those with young heads, appears to have been associated with similar trends in the proportions of these age groups in the country's adult male population. Thus, the proportion of males aged 65 and over within the total population of males aged 20 and over (we exclude the population under 20 since we need comparability with heads of families) rose from slightly under 12 percent in 1950 to about 14 percent in 1960, and then tended to remain at this level to 1968; similar proportions for females were slightly less than 13 percent in 1950, 16 percent in 1960, and 17 percent in 1968.¹ Table 2 shows that the proportion of families with heads aged 65 and over was 12 percent in 1947-52, 13.6 percent in 1959-61, and 14 percent in 1968. The trend in these shares in Table 2 is thus a reflection of the rise in the proportion of groups 65 and over within the total adult population, particularly male---and this rise in turn must have been associated with the decline in the birth rates in the earlier decades, and the extension of life associated with declines of death rates at advanced ages at rates possibly greater than the declines in the younger adult ages.

There is a rough parallel also between the proportion of families with heads aged below 25 and the proportion of males 20-24 in the total of all adult males (i.e., all males over 20). The latter proportion was about 11.5 percent in 1950, declined somewhat to 1960--about 10

¹These rates are from sources already noted, i.e., Historical Statistics of the United States, Continuation of Historical Statistics, and the Statistical Abstract of the United States, 1969--all cited in earlier footnotes and in the notes to the tables. Only new sources will be indicated in the discussion in this subsection.

percent, and then rose again to 12.5 percent in 1968. The percentage shares of this subgroup among all families in Table 2 moved from 5.1 in 1947-52 to 5.4 in 1959-61, and 6.6 percent in 1968. Here the rise in the proportion of young family heads is more consistent, and relatively more substantial, than that in the share of all males aged 20-24 among all male adults. The implication is that there must have been a rise in the marriage rate and in separate family formation--and some corroboration is provided by the indication that the median age of the groom at first marriage declined from over 23 years in the early 1950's to below 23 in the late 1950's and the middle (but not late) 1960's.

The trend in the proportion of families with female heads aged 25-64, shown in Table 2, can not be explained by movements in the proportion of all females of these ages within the total of all adult females. The statistics here refer to the incidence of broken or otherwise affected family units deprived of the male head by death, desertion, or divorce. And the rise in the share of such units, in this case estimated on the basis of ratios for 1968, from 7 percent in the early 1950's to 8 percent in the late 1960's, must reflect a greater incidence of divorce or other types of separation. Part of the explanation may lie in the greater weight of urban population in the later years, considering that urban families show greater incidence of female headship (see Table 1, lines 12 and 13); and there is enough evidence of a higher level of divorce rates to suggest why the share of families with female heads should have risen.

When we ask why there should have been a downward drift of these three family subgroups within the ordinal divisions of the total family

distribution, why the average income of these subgroups relative to that of all families should have declined, the answer is not easy to find in the available demographic data. And in considering this decline in relative income it must be recognized that, over the period covered, the sample data showed a substantial rise in per family and per person money income in constant prices. Table 3 below shows that per family money income in 1964 dollars increased from 4.9 thousand in 1947-52 to 8.6 in 1968, or some 75 percent over the period. Thus, even though income per family of the three subgroups did not grow as much over the period, it still grew some 61 percent for the group with heads aged below 25, and some 51 percent for the groups with heads aged 65 and over and with female heads---all rather substantial growth rates; and they would be about the same on a per person basis.

The lower growth rate of per family or per person income in the three family subgroups may be due to a variety of demographic and economic variables. The subgroup with older heads may have been characterized by a gradual rise in the average age over 65---suggested by the fact that within total male population over 65, the proportion aged 65-74 declined from 70 percent in 1950 to 64 percent in 1968, and that aged 75 and over rose from 30 to 36 percent.¹ And in so far as pensions and other fixed types of income formed an increased proportion of the incomes of heads aged 65 and over, rising inflation might have kept down the

¹The data for 1950 are from Henry D. Sheldon, The Older Population of the United States, a volume in the census monograph series, Social Science Research Council and Bureau of the Census (New York, 1958), Table A-2, p. 139. The 1968 data are from the Statistical Abstract, 1969, Table 8, p. 10.

growth of their real income. There may also have been increasing difficulty in retaining one's participation in the labor force, with continuous shift from self-employment to employee status within the active labor force.

The trend in the case of families with young heads may have been due to an increase in relative importance of occupations with a wider life cycle range of earnings--in which the younger entrants would be receiving incomes much lower than the occupational lifetime average. If this be true of groups such as professional workers or salaried managers and executives, the greater concentration of young entrants in these occupations might, despite the generally higher compensation levels in these occupations, make for a lag in the growth of per family income for these entrants behind the average. Sources S-I and S-II show that the proportions of professional workers and of salaried managers in the total (including heads not in labor force but excluding unemployed) rose from about 11 percent in 1948-52 to over 20 in 1968. And some contribution to the trend might have been made by young family heads who were still in training, even if in advanced stages, with some but rather limited income.

For the families with female heads one would have to consider the possibility that the proportion of Negro heads in this particular group increased over the period--with a very substantial shift of the Negro population to the cities, where the incidence of female headship is so much greater than in the countryside. Such a possible rise in the proportion of Negro among all female heads aged 25-64 would retard the

growth rate of income per family for that subgroup--which could also be affected by fixed income components (such as pensions or relief payments) that do not respond adequately to rises in consumer prices.

The suggestions above are clearly ad hoc, and could be pursued further with greater effort to assemble and probe into the relevant data. But within the limits of this paper, we can only suggest the variety of demographic and economic variables that would be involved in attempts at explaining the downward drift in the relative income position of the three selected family subgroups; and identify some of the obvious variables because they may be typical of other developed countries in similar stages of their economic growth and social development.

3. Effects on the Income Distribution

The trends illustrated and noted in the preceding section have clearly contributed to wider inequality within the distribution of money income among families. The rise in the proportions of families with young heads, old heads, and female heads, would have contributed to widened inequality even if the income per family, within each of these three subgroups or for the three combined, relative average family income of all families, would have remained the same. But the relative income for each of these subgroups, and for the three combined, declined rather than remain constant--which contributed further to widening income inequality.

The question to be asked now is whether the contribution of the three selected family subgroups to wider inequality has resulted in

wider inequality in the money income distribution among all families; and what happens when from the money income distribution among all families, we subtract these special family subgroups, whose income could be expected to be lower than average--given the characteristics of the head. A tentative answer is provided by the calculations summarized in Table 3.

Panel A of this table (lines 1-5) shows the income shares of the ordinal divisions distinguished in the sources, with slight adjustments of the shares in 1968 for greater comparability with earlier years. The impression is of relative stability of the distribution for the 1950's; the shares in 1959-61 are about the same as they were in 1947-52. Thus, as per family income grew by over a third, relative inequality remained about the same. It was only in the 1960's that inequality narrowed somewhat, with the share of the lowest fifth rising to over 5.5 percent, and that of the top 5 percent division dropping from 16.8 to 14.5 percent. But these movements toward greater equality were minor.

Panel B shows the effect of the exclusion of the three family subgroups, and of the resulting re-calculation of the shares of similar ordinal divisions in the distribution. The details of the procedure are described in the notes to the table and need not be repeated here--except to indicate that the procedure is approximate, and that a more thorough re-calculation might have had a somewhat greater, but not much greater effect. The panel reveals, first, that the per family income of the new distribution (column 7, lines 5-10) is, expectedly, above

Table 3 Percentage Shares of Income Received by Ordinal Groups; Distributions of Families by Money Income, Original and Omitting the Three Family Subgroups, or Allowing for Differing Size of Family Among Ordinal Groups, 1947-1968

	Ordinal Groups						Average Income per Family, \$1964 (000's) (7)
	Lowest Fifth (1)	Second Fifth (2)	Middle Fifth (3)	Fourth Fifth (4)	Top 80 to 95% (5)	Top 5% (6)	
<u>A. Shares and Averages in the Original Distribution</u>							
1. 1947-52	4.8	12.1	17.2	23.4	25.3	17.2	4.93
2a. 1953-58	4.8	12.3	17.8	23.8	25.1	16.2	5.83
2b. 1955-58	5.0	12.4	17.9	23.6	24.9	16.2	6.02
3. 1959-61	4.9	11.9	17.6	23.5	25.3	16.8	6.69
4. 1962-64	5.1	12.1	17.5	23.8	25.6	15.9	7.21
5. 1968	5.6	12.3	17.7	23.6	26.3	14.5	8.63
<u>B. Shares and Averages, Distribution excluding Families with Young, Old, and Female Heads (col. 7 shows relative of income per family in the adjusted distribution to that in lines 1-5)</u>							
6. 1947-52	5.8	12.9	17.5	23.0	24.8	16.0	1.08
7. 1953-58	6.1	13.5	18.1	23.1	25.0	14.2	1.09
8. 1959-61	6.3	13.2	17.8	23.1	24.4	15.2	1.12
9. 1962-64	6.6	13.2	18.1	23.2	24.7	14.2	1.12
10. 1968	7.3	13.6	17.9	23.5	24.9	12.8	1.15
<u>C. Shares and Averages, Distribution Adjusted for Differences in Average Size of Family Among Ordinal Groups (col. 7 shows average income per person, thousands, in 1964 \$)</u>							
11. 1947-52	5.4	13.1	17.6	24.0	24.6	15.3	1.37
12. 1955-58	5.9	13.1	17.8	23.4	24.8	15.0	1.62
13. 1959-61	6.0	12.7	17.5	23.2	24.9	15.7	1.80

Table 3 (continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Panel C (concluded)</u>							
14. 1962-64	6.3	13.0	17.5	23.2	25.0	15.0	1.91
15. 1968	7.1	13.6	18.1	23.1	24.8	13.3	2.37

	Periods						% Change, Col. 1-6
	1947- 52 (1)	1953- 58 (2)	1955- 58 (3)	1959- 61 (4)	1962- 64 (5)	1968 (6)	
							(7)

D. Aggregative Measures of Inequality

16. Average Gini ratio, distributions in lines

1-5	0.373	0.360	0.355	0.370	0.359	nc	nc
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17. Sum of deviations, lines

1-5	51.8	50.2	49.4	51.2	50.6	48.8	-5.8
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18. Sum of deviations, lines

6-10	47.6	44.6	nc	45.4	44.4	42.4	-11.3
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19. Sum of deviations, lines

11-15	47.8	na	46.4	47.6	46.4	40.4	-15.5
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E. Range: Ratio of Shares of Top Fifth to that of Lowest Fifth

20. Distributions

in lines 1-5	8.86	8.60	8.22	8.59	8.06	7.29	-17.7
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21. Distributions

in lines 6-10	7.03	6.42	nc	6.29	5.89	5.17	-26.5
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22. Distributions

in lines 11-15	7.02	na	6.75	6.77	6.35	5.37	-23.5
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nc - not calculated

na - not available

Table 3 (continued)

Notes

Lines 1-4, columns 1-6: Calculated from S-I, Table 25, pp. 182-87. This table shows annual shares of the five fifths and of the top 5 percent groups; and the entries here are arithmetic means of these shares for the periods shown in the stub. The share of the top 80-95 percent group was calculated from those of the top fifth and the top 5 percent.

Lines 1-4, column 7: Arithmetic mean income per family in current prices is shown annually in the table cited for lines 1-4 above. Reduction to 1964 prices was by the index shown in S-I, p. 33 (consumer prices index). The averages for the periods are logarithmic means.

Line 5: Derived from S-II, Table 8, p. 22 (shares in income of ordinal divisions) and Table A, p. 1 (which shows income in current and 1968 dollars for 1947, permitting us to shift the price base to 1964). Since some revisions were made in the sampling procedure between 1966 and 1968, there was slight incomparability in the percentage shares of income of identical ordinal divisions. An overlap, given for 1966, permitted the slight adjustments in the 1968 income shares needed to make them comparable to those in earlier years.

Lines 6-10, columns 1-6: The underlying calculations assume that within each ordinal division, average income per family of the three subgroups is the same as that for the rest of the division. This assumption is corroborated when we compare the arithmetic mean income relative, derived from multiplying the shares in columns 1-6, lines 16-20 of Table 2 by the per family income relative indicated in columns 1-6, lines 1-5 of the present table, with the average income relative directly calculated (in column 7, lines 16-20 of Table 2). The two sets of relatives for the successive periods are: 0.736 and 0.726; 0.695 and 0.686; 0.668 and 0.655; 0.666 and 0.660; 0.639 and 0.629. The assumption over-estimates the shares of the three omitted subgroups, but so slightly that the error is negligible.

Given the above assumption, we subtract the omitted subgroups, both their number and their income, from the total number and income of each ordinal division; re-cumulate the arrays of shares in number and of shares in income remaining; and interpolate a new set of ordinal partition lines (based on logarithms of the cumulated new percentage shares in numbers and in income).

Lines 6-10, column 7: From columns 7 and 8, lines 21-25 of Table 2.

Lines 11-15, columns 1-6: Lines 26-30, columns 1-7 of Table 2 show average number of persons per family, within each ordinal division and for the total distribution. Multiplying by the percentage shares of the ordinal divisions within the total of families gives us the proportion of all persons (in families) in the lowest fifth all families, in the second fifth, and so on. Given these percentage shares in total of persons, and the percentage shares in total of income (both limited to families), the latter shown in lines 1-5, columns 1-6 of this table), we can re-cumulate the percentage shares in numbers and in income, and interpolate new partition values (again based on logarithms of the

Table 3 (continued)

Notes (concluded)

the cumulated percentage shares in persons and in income).

Lines 11-15, column 7: Calculated from the average income per family, column 7, lines 1-5 of this table; and average number of persons per family, column 7, lines 26-30 of Table 2.

Line 16: The Gini ratios are given annually in S-I, Table 25, pp. 182-87. The entries are arithmetic means (logarithmic means would be almost the same).

Lines 17-19, columns 1-6: Sums of deviations of percentage shares in income from the percentage shares in numbers, signs disregarded--obtained from lines 1-5, 6-10, and 11-15, respectively.

Lines 20-22, columns 1-6: Ratio of the income shares of the top fifth to that of the lowest fifth--calculated from lines 1-5, 6-10, and 11-15, respectively.

that of the original, wider distribution, by a percentage that rises steadily from 8 in the earliest period to 15 in 1968. Second, the general level of the shares of the lowest fifth, and to a lesser extent of the second fifth, are raised perceptibly, while those of the 80-95 percent, and particularly the top 5 percent group, are lowered--thus narrowing inequality significantly. Third, and most important, the adjusted distribution in lines 6-10 shows a steady contraction of inequality--in that the share of the lowest fifth now rises steadily from 5.8 to 7.3 percent; that of the second fifth less steadily from 12.9 to 13.6 percent; while that of the top 5 percent drops from 16.0 to 12.8 percent (lines 6 and 10, columns 1, 2, and 6). In short, the comparison of the two panels reveals that while the income distribution among all families in Panel A is relatively stable, with only slight movement toward greater equality in the 1960's, the distribution in Panel B, among families with male heads aged 25-64 (what might be called "standard" family units), showed a sustained movement of some magnitude toward greater equality through almost the whole period.

Largely as a result of the trends in the proportion and relative distribution of the three family subgroups distinguished, there were movements in the differences in number of persons per family among the ordinal divisions. The adjustment, in Panel C, allows only for the changing differences in average number of persons per family among the six ordinal divisions. It does not represent conversion of the original distribution among families to an approximation to a distribution among persons. In such a conversion, each of the size groups of families

within each income class (if not each individual family) would have to be reduced to a per person basis, and then the resulting cells re-cumulated and new partition lines drawn. Depending upon the assumptions used, the conversion might result in a different range of income inequalities, if not in different time trends. The adjustment in Panel C is far more limited, being only for differences among wide ordinal divisions in average size of family, differences largely associated with the shares and family size of the four family subgroups distinguished. In short, the adjustment is for family size largely as affected by and associated with families with distinctive age and sex characteristics of head.

Given the nature of the adjustment, it is not surprising that the differences between Panel C and Panel A are similar to those between Panels B and A. Here also the adjustment narrows perceptibly the range between income shares of the lower and upper fifths, and reveals a sustained narrowing of inequality over the period.

Panels D and E provide crude measures of inequality. Panel D concentrates on the sum of differences, signs disregarded, between percentage shares in numbers and in income, of the six ordinal divisions distinguished. This measure is closely connected with the Gini ratio, the latter being based on the differences between cumulated percentage shares in numbers and income, whereas the sum of deviations used here is the sum of differences of uncumulated percentage shares (the two arrays being the same); and the similarity between the movements of entries in lines 16 and 17 reveals this close association. The average deviation shows, as might have been expected from Panels A-C, a much

more substantial reduction of inequality in the adjusted than in the original distributions. And the reduction is not minor: with full equality, the average deviation would be 0; a reduction of over a tenth or a seventh toward 0 is a substantial step toward the goal of complete equality, if it be considered a warranted goal.

Panel E provides a measure of the range--which has narrowed relatively more than the average deviation from equality. And here again the reduction of inequality was significantly greater in Panels B and C than in Panel A.

4. Summary and Implications

The findings here can be summarized in four brief paragraphs.

First, the family units with young, old, and female heads, which in 1968 accounted for 28.5 percent of all families, are concentrated in the lower income brackets; and particularly dominate the lowest fifth, of which they formed two-thirds in that year. The lowest quintile, to the extent of two-thirds, is thus comprised of young, old, and "broken" families.¹

Second, over the period since the late 1940's, the proportion of these three family subgroups rose--the combined share rising from 24.2 to 28.5 percent; and, more important, these groups drifted downwards

¹A similar finding was stated in my earlier paper, published in 1962 and based on the series through 1959 (see "Income Distribution and Changes in Consumption," in Hoke S. Simpson, ed., The Changing American Population (New York, 1962), pp. 21-58, particularly pp. 33-41.

within the total distribution, their per family income relative to average income of all families declining over the period. Thus, the share of these three subgroups within the lowest fifth was below 50 percent in 1947-52, not two-thirds as in 1968; and the combined per family income of the three groups relative to that of all families declined from 0.73 to 0.63.

Third, if we exclude these three subgroups, and limit the family distribution to those with male heads aged 25-64 (what might be called "standard" units), the new income distribution shows an appreciably narrower inequality; and it is particularly interesting that this new distribution reveals a more consistent and larger narrowing of inequality over the period. Whereas in the original distribution inequality remained about the same during the 1950's and declined slightly in the 1960's, it narrowed more and more consistently through most of the period in the adjusted distribution.

Fourth, a somewhat similar result is found if we recognize that the young and old family head units are characterized by much smaller families than the average; and contribute greatly to differences in average size of family among the wide ordinal divisions in the total family distribution. An adjustment for these differences in average size of family would also yield an income distribution with a more sustained and larger movement toward equality over the period.

While the discussion above dealt with a rather limited component and aspect of the family income distribution, age and sex characteristics of the head, the findings suggest broader implications--in the sense that there is a rather wide variety of demographic and non-economic

aspects of family structure that may affect the family income distribution; and also in the sense that the effects on the meaning of income inequality may be far reaching. This paper may be concluded with brief comments on these possible wider implications.

To begin with, trends in proportions such as were illustrated in Table 2, viz., the rises in the shares of family units with young, old, and female heads, are likely to be found in other developed countries-- in which the movements of birth, death, and marriage rates, and increasing urbanization with progressively easier divorce and separation, may have had similar effects. By the same token, differences in the proportions of these three family subgroups may be expected between the developed, urbanized economies, with their nuclear families, on the one hand, and the less developed, agricultural, more traditional economies that may still retain many of their larger, extended families, on the other hand. Also, at any given period (say over the last two decades), the trends in the proportion and relative income position of special family subgroups such as those distinguished here may have moved in the less developed countries in ways different from the trends in the developed countries. Thus, the adjusted income distributions in the former might move differently from those in the latter, even if the unadjusted distributions in the two groups of countries were changing in a similar fashion.

Furthermore, other demographic aspects of family structure, besides those emphasized here, may have considerable effect on the income distribution among families. Two illustrations may suffice.

The first relates to number of children under 18, or below whatever age is treated as one signifying readiness for active participation in

the labor force. While we observed that the families with heads aged 65 and over are, expectedly, characterized by a very low proportion of units with children under 18, the differences in number of young children among all other families must still be quite wide; and affect the income position of families, particularly when reduced to a per person basis. Variation in this characteristic of family structure is clearly dependent upon the general level of birth rates, and the extent to which the transition from high to low birth rates has resulted in major differentials in the birth rate among the various economic and social groups within the population.

The second illustration is directly connected with the first. The rates of natural increase may differ substantially between lower and upper income bracket families, particularly in the developed countries, because birth rates differ substantially and the higher birth rate among the lower income groups more than compensates for any excess in the death rates compared with the upper income groups. Thus the next generation of descendants of the lower income groups accounts for a larger share of total population, and probably of family units, than these lower income groups did earlier. What is the effect on the ordinal shares in the distributions for the two successive generations? And what is the consequence or the absence of such effects in less developed countries, in which such differences in rate of natural increase, associated negatively with income level, may not prevail, or be of smaller amplitude?

Finally, one may ask what is the nature of income inequality contributed by the present and lower income of family units with young

or old heads. One could argue that from the standpoints of productivity, equity, and welfare, the incomes of these units, on a per person basis, should be lower than those in the "standard" family units. After all, young family heads are in their training period, may look forward to much higher returns that would compensate them later, and no equity or welfare considerations warrant claiming for them a per person return as high as that which they themselves will secure later--so long as the current returns are minimally adequate otherwise. Old family heads, largely in their retirement period, do not contribute sufficiently to earn an income equal to that of prime members of the labor force; nor do they need such income for purposes of further investment, either for improving their efficiency or for retirement, or for utilizing the variety of new products--given the limited time prospects of the older family heads, and their lesser receptivity to new products than among the younger family units. It is thus permissible to argue that the income inequality contributed by the lower incomes of the young and old head units represents no contribution to unwarranted earnings differentials. If so, the demographic trends that raise the proportions of the family units with these young and old heads, or even those that make for a decline in their standing within the income distribution, contribute to a widening of income inequality that has none of the analytical meanings often attributed to wider inequality. And a similar argument may be made for all demographic and other non-economic differences which may affect the income distribution, and in fact, represent life cycle and other near-biological differences that have a "warranted" reflection

in income differentials and inequalities. The very meaning of income inequality in the customary distributions, and of trends in such inequality, is obscure unless the income effects of these demographic and other non-economic, institutional, differences, and of their movements, are recognized.