INCOME AND CONSUMPTION DISTRIBUTION TRENDS IN THE PHILIPPINES, 1950–70*

BY ALBERT BERRY

University of Toronto, Canada

Unlike most developing countries, the Philippines has had several (four) reasonably comparable family income and expenditure surveys, covering a reasonable period of time (15 years). This study draws on those surveys and on wage data in an attempt to judge how, if at all, the distribution of income has been changing. The household survey data shows a declining share of both income and consumption for the top income groups; for the bottom quintile the share of recorded income fell while that of recorded consumption rose. When possible biases of the data are allowed for, it is hard to argue that either a narrowing or widening of income differentials occurred over these years. Real wages of a number of important occupations appear to have fallen, however. Only a partial reconciliation of the trends indicated by these wage series and the income trends for various occupational groups implicit in the household survey data was possible, indicating either data problems or the need for more subtle interpretations of the data. Since structural change in the labour force has been rapid (an increasing share being found in the high income occupations as time passed), declining wage rates for certain lower income groups cannot be taken to imply a general worsening of distribution. Our final conclusion is that distribution has probably changed little, and is about as likely to have changed one way as the other.

Like most developing countries, the Philippines has relatively unequal distributions of income and of expenditure as far as can be ascertained from available data. According to 1971 information (and converting at the 1971 exchange rate), it appears that about 45 percent of its population is found in families with incomes of less than U.S. $100 *per capita*.[1] As relevant as the absolute levels of income for the population and its various subgroups are the trends for the relatively less well off groups. A major source of worry with respect to the development of the Philippine economy in the latter part of the 1960s and the early 1970s was the declining real wages recorded for many occupations, despite increases in *per capita* income for the population as a whole. These data suggest a worsening of the income distribution in an already poor country, leading to a bleak prospect for many Filipinos at present and in the near future.

This essay reviews some of the relevant information on income distribution and tries to draw tentative conclusions about trends over the last fifteen or twenty years. Basic sources of information are the *Family Income and Expenditure Surveys* (FIES) of the Bureau of the Census, the national accounts, and data on wage trends. Since the FIES are the richest and most complete source of information, but are at the same time subject to familiar biases related to the difficulty of getting complete reporting, it is important first to check consistency between this and other sources.

---

[1] Assuming underreporting of income of about 25 percent in the 1970–71 Family Income and Expenditure Surveys. (See below).

*Note: A more detailed discussion of the statistics presented in this paper is available from the author. It is cited here as the statistical appendix.

A. EVIDENCE ON DISTRIBUTIONAL TRENDS: THE FIES

As Table 1 indicates, there is a substantial discrepancy between the FIES and the national accounts. A substantial shortfall between personal income as reported in the FIES and that calculated in the national accounts occurs for all four of the FIES, and ranges around 30% in each case. The personal consumption recorded in the FIES, on the other hand, is much closer to the national accounts estimates in recent years, being only 13–14 percent lower in 1970–71 whereas it had been around 35 percent lower in 1956–57. Since the difference between personal income and personal consumption is personal savings, the two sources are particularly divergent with respect to their estimation of that variable.

Without a more in depth analysis, one cannot judge how these discrepancies affect the usefulness of the FIES surveys in tracing out income distribution trends. It is often argued that national accounts tend to underestimate the variables they seek to measure; it seems a reasonably safe presumption that they do not overestimate the true values. But the change in level of accuracy over time is much harder to guess. Tentatively one might conclude that the FIES studies have had increasing accuracy and coverage of the expenditures they report over the period in question, but perhaps not with respect to income. If, say, 65 percent of consumption was reported in 1956–57 and 87 percent in 1970–71, it is important to know for which income categories the completeness of reporting increased over the period; conclusions with respect to trends in consumption distribution could be very sensitive to this. And with presumed underreporting of at least 30 percent for personal income, it would be hard to say much about income distribution trends without some evidence on how relative underreporting by groups changed over the years. With these caveats in mind, we turn to the FIES themselves, and what they suggest with respect to income distribution trends over time.

For all families together, the four surveys indicate virtually no change in the Gini coefficient for family income and a decrease in the Index of Quintile Inequality, occurring between 1965 and 1971; over that period, the recorded share of the top 5 percent declined substantially; for most other groups no dramatic changes were noted. (See Table 2.) But the lowest and second lowest quintiles of rural families lost substantially (and continuously for the lowest one) between 1956 and 1970–71; the sharp relative decline for the poorest quintile— from 7.0 percent to 4.4 percent of rural income—indicates a decline in absolute terms as well; it was the source of a decline in the recorded income share of the bottom 20 percent (rural and urban together) from 4.5 to 3.7 percent over this 15 year period.[2]

[2]In interpreting the 1965–1970/71 movements of real variables, especially of consumption but also of income, it is important to note that the last sample, sometimes referred to as that of 1971, corresponds in fact to the period May 1970–April 1971. The estimates of food, alcoholic beverages and tobacco were, however, based on the week previous to the sample visit, i.e. to May 1971. It was true also of earlier samples that these expenditures were blown up from those recorded in the week before the visit. In the 1965 FIES, for example, the visit occurred in May 1966. This creates problems which become particularly severe when there is inflation. If the appropriate dating point for the expenditures was January 1971, then the Consumer Price Index in Manila would be 4.1 percent less than in 1971 overall, and in regions outside Manila, it would be 8 percent less, and overall about 7 percent less.

TABLE 1

COMPARISON OF NATIONAL ACCOUNTS AND FIES LEVELS OF PERSONAL INCOME, PERSONAL DIRECT TAXES, AND PERSONAL SAVINGS

1956, 1961, 1965, AND 1970/71

(In million pesos at current prices)

	1956[a] FIES[b] NA[c] (1)	1961 FIES NA (2)	1965 FIES NA (3)	May/70–April/71 FIES[d] NA (4)	Average Annual Growth Rate	Average Annual Growth Rate			
Personal Income I	0.71	0.65	0.70	0.68	Personal Income				
II		0.623	0.63	0.71	NA	25%	9.7%	13.2%	13.2%
					FIES	20.5%	7.4%	15.8%	13.7%
Personal Consumption I	0.609	0.694	0.844	0.861					
II	$(0.669)^e$	$(0.755)^e$	$(0.880)^e$	$(0.871)^f$	Personal Savings				
					NA	40.7%		20.7%	−1.3%
Personal Savings	1.96	0.04	−0.72	−1.76	FIES	−49.3%		−615.3%	−28.9%
Personal Direct Taxes	0.70	0.39	0.36	0.12					
					Personal Direct Taxes				
					NA	102%	18.1%	47.8%	32.3%
					FIES	182%	193.2%	43.0%	−0.06%

[a]Reference period, March 1956–February 1957.

[b]Total family income.

[c]NA figures are revised. They were adjusted to link them with the revised figures in the national income accounts, 1960–72. The adjustment factor used was the average ratio of revised GNP to unrevised GNP for 1960–62. NA 1956 is from the *Statistical Reporter*, Vol. XVII, No. 2, April–June 1969.

[d]National accounts figures for income and consumption are calculated to approximate the year May 1970–April 1971, by multiplying the 1970 figures by 0.667, the 1971 figures by 0.333, and summing. Unfortunately the FIES expenditure figures do not in fact correspond to the May 1970–April 1971 period for all items; for food, tobacco and beverages in particular the reference consumption period was a week prior to the interview (thus falling in April 1971) and both prices and quantities apparently reflected that. (*Family Income and Expenditures: 1971*, BCS Survey of Households Bulletin, Series No. 34, Manila, 1973, p. xii.) The national accounts figures indicate that 1970 personal consumption expenditures were 79 percent of the 1971 level, so shifting the reference point of time back 6 months would reduce expenditures by about 11 per cent. Such a shift is necessary for food, alcoholic beverages, and tobacco which account for 61.4 percent of total family expenditure as recorded in FIES. This suggests that total personal expenditures be decreased by about 6.8 percent from the FIES figure. We here reduce it by 6.5 percent.

[e]Corrected for population underestimates by the ratio of Ruprecht's estimate (prepared as part of background work for the ILO report, *op. cit.*) to the FIES estimate. Assumes the underestimate of population did not enter the personal income or consumption estimates of the national accounts. The personal income estimate used in NA is a direct sum of employment compensation, but the latter consumption estimates appear to be a residual (*Statistical Reporter, op. cit.* p. 23). Savings is also a residual. (*Ibid.*, p. 26).

[f]Assumes Ruprecht's figure is for mid 1971.

Sources and methodology for Table 1: Estimate I of personal income shown here is based on calculation from income sources and estimate II on summation of personal consumption expenditures, personal direct taxes, and personal savings, all of which are apparently estimated elasticities derived from the FIES so they are not independent. (See *The National Income Accounts*, 1967–72, NEDA, Manila, 1973 p. 4). For further details see the statistical appendix.

TABLE 2

INDICATORS OF FAMILY INCOME DISTRIBUTION: 1956–7 TO 1970–71*

	1956			1961			1965			1970/1		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Share of total family income of families grouped by family income												
Lowest 20 percent	4.5	7.0	4.5	4.2	5.9	3.8	3.5	5.0	3.8	3.7	4.4	4.6
Middle 70 percent	56.1	62.9	55.9	54.8	63.0	55.3	56.5	65.0	55.5	59.4	61.2	62.0
Top 10 percent	39.4	30.1	39.6	41.0	31.1	40.9	40.0	30.0	41.7	36.9	34.4	33.4
Top 5 percent	27.7	.	.	29.0	.	.	28.7	.	.	24.3	22.6	22.6
Index of quintile inequality	0.44	0.34	0.44	0.46	0.36	0.46	0.45	0.38	0.47	0.40	0.41	0.41
Gini coefficient	0.48	0.38	0.49	0.50	0.40	0.52	0.51	0.42	0.53	0.49	0.46	0.45
Indices (1956–7 = 100) of:												
Mean real family income	100	100	100	109.0	110.8	111.3	122.5	128.6	133.0	127.7	147.6	125.3
Mean *per capita* income	100			107.0			118.7			125.4		
Mean urban family income/mean rural family income	2.45			2.47			2.51			2.08		

. = not available

*Note that the definition of rural and urban has been changed several times over the period under discussion. (See *FIES, 1971*, p. xiii.) The change seems to have been particularly important between 1961 and 1965, judging by the fact that a higher share of families were classified as rural in the latter year (70 percent) than in the former (66 percent). The definitional changes between 1965 and 1971 worked in the same direction but less strongly.

Source: ILO, *Sharing in Development*, 1974, p. 10, with slight adjustment to the 1971 figures to take account of the distribution calculated by the BCS and presented in *FIES, 1971*, p. xxi.

The figures for income *per capita* were calculated by the author. Deflation is by the consumer price index for the Philippines. (See Central Bank of the Philippines, *Statistical Bulletin*.) For March 1, 1956/February 27, 1957, the Manila index was used since the national one was not available. In deflating rural and urban incomes, we used the consumer price indices of "outside Manila" and "Manila" respectively.

Data on consumption expenditures are useful both as a check on income statistics and as a proxy for permanent income—possibly a better proxy than is current income. Data on consumption from these same FIES run counter to some of the more pessimistic implications of the income data. Table 3 presents trends in the consumption distribution by families. That the top 5 percent has lost is again indicated.[3] The recorded share of the next 15 percent also fell slightly from 29.5 to 27.8 percent. The figures suggest an increase in the consumption share of the bottom 20 percent, from 5.0 in 1956–57 to 5.9 percent in 1970–71. Such improvement as is registered over 1956–57 to 1970–71 occurred entirely over 1956/57–1961, however, with the overall quintile distribution changing very little since then (although there was some worsening of the rural distribution and some improvement of the urban distribution). This fact raises the possibility that the improvement recorded for the period as a whole may not be a real one since, as indicated earlier, the 1956–57 survey seems to have achieved substantially less complete reporting of consumption than the succeeding ones, assuming the national accounts figures are reasonably accurate. (See Table 1.) Further there is a strong suggestion that food expenditures were particularly underreported, which underreporting if it were equally or more severe for the lower consumption groups would lead to an overestimate of consumption inequality. With improved reporting, this bias would disappear. The 1956–61 trends are consistent with this interpretation, though of course others are also possible.

A measure of the non-coincidence of the income and consumption distributions is provided by the shares of total consumption by income categories (Table 4). Families with particularly low (high) income have a much higher (lower) share of consumption than they do of income. The lowest quintile of families by income had 3.7 percent of income but 5.9 percent of consumption. In the rural areas the consumption share of low (high) income people has risen (fallen) moderately at the same time that the income shares have moved in the opposite direction. In urban areas the same trend is more marked; overall the increase in the consumption share of the bottom quintile is considerable—5.1 to 8.6 percent—although a good part of it was registered during 1956–61. The decline for the top 5 percent of all families was dramatic, from 24.9 to 15.7 percent, and more or less continuous.

In summary, consideration of the trends in the family distribution of consumption, either by income classes or by consumption classes, throws serious doubts on any pessimistic conclusions which might be drawn from the recorded trends in family distribution of income; if anything, some improvement seems to be suggested by those data. But given the probable degree of underreporting of consumption in the early years and its apparent decline over time, recorded trends in consumption distribution may not be better reflections of trends in, say,

---

[3]It may well be that top incomes and bottom ones are the least accurately reported, in the former case because of fear of disclosure and in the latter more because of complexity, importance of home consumption, etc. Any conclusion with respect to changes in the income share of, say, the top 5 percent would have to be verified by other types of information before warranting high confidence. The data on expenditure are presumably substantially more reliable, although desire to conceal income probably implies in some cases a desire to conceal certain types of expenditure too.

TABLE 3
INDICATORS OF FAMILY CONSUMPTION[a] DISTRIBUTION: 1956–57 TO 1970–71

Families Grouped by Family Consumption	1956–57			1961			1965			1970–71		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Lowest 20 percent	5.0			6.0	7.5	5.1	5.7	6.8	5.2	5.9	6.9	6.2
Middle 70 percent	59.6			62.3	68.2	63.8	61.8	68.9	62.1	63.3	66.4	67.0
Top 10 percent	35.4			31.7	24.3	31.1	32.5	24.3	32.7	30.8	26.7	26.8
Top 5 percent	23.4			21.1	15.3	18.7	21.4	15.1	18.8	19.4	16.7	16.5
Index of Mean Family Consumption	100	100	100	123.7	135.4	114.9	158.5	178.5	159.6	175.2	207.8	166.6
Ratio of Mean Urban Family Consumption to Mean Rural Family Consumption	2.44			2.02			2.16			1.52		

[a]Including taxes paid and gifts/contributions to others.

Sources and methodology: Figures are based on expenditure data by expenditure class in the four FIES surveys. For details see the statistical appendix. Note again the non-constancy of the definitions of rural and urban area over 1956–71; see footnote to Table 2.

TABLE 4

CONSUMPTION SHARES BY INCOME CLASS: 1956, 1961, 1965, 1970–71

Families Grouped by Family Income	1956			1961			1965			1970–71		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Bottom 20 percent	6.0	8.0	5.2	7.6	10.7	6.8	9.0	11.2	7.9	8.6	10.6	8.6
Middle 70 percent	57.9	66.5	58.6	57.1	67.3	62.3	61.8	68.7	61.7	64.9	66.9	67.6
Top 10 percent	36.1	25.5	36.2	35.3	22.0	30.9	29.2	20.1	30.4	26.5	22.5	23.8
Top 5 percent	24.9	15.4	18.3	20.3	13.6	19.3	19.5	11.6	19[a]	15.7	13.4	14.6

[a]Rough estimate since whole of top 5 percent fell in the open-ended top income category.

Source: The FIES for the four years in question.

permanent income than are the recorded income distribution trends. At least the aggregate level of income underreporting seems not to have changed much. The recorded consumption distribution trends can be substantially affected by whether consumption reporting improves more for families near the bottom or near the top of the distribution.

Demographic Aspects of Family Income and Consumption Distribution Trends[4]

A possible interpretation of the different movements of family income and consumption distribution trends is that low income families (e.g. young or old ones) are increasingly able to consume well above their income levels when these are very low. This development may be associated with increasing capacity of young families to borrow and of older (e.g. retired) families to live on past earnings or on gifts, and in such a case would probably be a favorable omen. Its applicability in the Philippines is consistent with the increasing real average income trends revealed by the national accounts and the FIES, though as discussed later, trends in consumption patterns and in certain wage rates are not obviously consistent with the calculated income trends.

Other major problems with the income distribution data as they emerge from the FIES relate to (a) the lumping together of persons and families of all different ages, (b) the fact that families vary in size and composition, and (c) the inability to take account of differences in the price vectors applicable to different families. Before asking how changes in the demographic and price components may have affected trends in income distribution, it is helpful to review those components briefly.

Age of Household Head and Income

Kuznets and others have drawn attention to the importance of life cycle factors in the observed family income distribution. Average household income in the Philippines varies substantially by age of household head, rising by over 50 percent between the categories 25–34 and 55–64. In the U.S., Israel and Taiwan, the variation in income between the highest and lowest 10 year category within the range 25–64 was about 30 percent, 12 percent, and 25 percent respectively. The greater variation in the Philippines may be associated with a more strongly positive association between family size and age of head than characterizes the other countries, especially the U.S. and Israel, but this cross tabulation is not presented in FIES, 1971.

Though most of the family income variance associated with age of household head relates to the age groups lying in the range 25–64, a considerable share of poor families are at the two age extremes.[5] Table 5 shows that in 1970–71 whereas families with household head under 25 years (over 65) made

---

[4]A useful discussion of how demographic variables affect the observed family distribution of income, including a discussion of the 1971 FIES, is Simon Kuznets, "Demographic Components in Size-Distributions of Income," Yale Economic Growth Center Discussion Paper No. 226, April 1975.

[5]The share of families with head <25 or ⩾65 is around 20 percent in the U.S. and Israel but below 13 percent in the Philippines (Kuznets, *op. cit.*, p. 30).

320

up only 5.0 (7.8) percent of all families, they composed 8.2 (12.8) percent of families with recorded income of less than a thousand pesos per year. These two categories accounted for 25.1 percent of all families with less than 500 pesos per year and 19.1 percent of those with 500–999 pesos while making up only 12.8 percent of all families.[6]

TABLE 5

POVERTY AND AGE OF HOUSEHOLD HEAD

	Household Head less than 25	Household Head 65 or over
Share of all families	5.03	7.80
Share of families with recorded incomes <1000 pesos[a]	8.16	12.80
Share of families with recorded incomes <2000 pesos[b]	7.03	9.37

[a]These families constitute 17.3 percent of all families.
[b]These families constitute 41.2 percent of all families.
Source: *FIES 1971* pp. 12.

Family Size and Family Income

The positive correlation between family income and family size is very important. When family income is the measure employed, the larger families appear higher in the distribution than they would if *per capita* income of the family were the classifying variable. Whereas families of ten or more persons had median income four times that of one person families in 1971 (2,911 vs. 1,095) the *per capita* income of the latter was about three times higher (1,095 vs. 360). (See Table 6.) To get some feel for the effect of this relation on the estimated equality of income distribution, and beginning with the information on family income by family size, one can estimate a distribution of income by persons by assuming that each family has an equal intra-family distribution of income among members. As Table 7 shows, this distribution is very similar to that of family income;[7] the positive relationship between family income and number of persons apparently just offsets the negative relationship between per person income and family size. For families with 7 or more persons, family income tends

[6]Kuznets (*op. cit.*, p. 30) notes that the relative family income of families with household head 65 and over is not as low in the Philippines (0.95) as it was in the other countries in his sample (U.S., Israel and Taiwan). Accordingly he concluded that the two extreme age classes(<25, ≥65) "contribute little to the disparity associated with the age of head variable" (p. 30). Their exclusion had little effect either on the Gini coefficient or on Kuznets' "Total Disparities Measure" (p. 39).

As Table 5 shows, the group with household head 65 years and up does include a quite disproportionate share of low income households; this is consistent with Kuznets' observation that their relative income is not low, since the income variance for this set of families is far above that of all families taken together. (See *FIES 1971*, p. 128). It would be of great interest to know whether much of this high income variance is associated with high variance of family size.

[7]This is consistent with the finding of Kuznets (*op. cit.*, p. 99), who notes that "the TDMs and Gini coefficients remain large for the Philippines, even when we shift from income disparities among households (classified by income per household) to disparities among persons (similarly classified). If we had shifted the whole distribution to a per person basis (as was done for the other three countries), total disparity in the distribution of income among persons, by per person income per household, would still have been quite high."

321

TABLE 6

FAMILY INCOME AND INCOME *PER CAPITA*,[a] BY FAMILY SIZE, 1971

	Family Size		
	1	2–5	≥6
Rural and urban: median family income	1,095	1,995	2,934
Median family income per family member[a]	1,095	692	374

[a]Whereas income *per capita* was the variable we sought to use here, it could only be estimated indirectly and approximately, so the variables median family income and "median family income per family member" are presented. For all families, mean income is 3,736 and median income 2,454.
  Source: FIES, 1971, pp. 3–6.

to be two or more times higher than that of families with 1 or 2 persons in rural areas (we have not made the calculations for urban and rural together), the median and mean family size are 60 percent or more higher in the second highest income category than in the botton one, and the number of working members is about twice as high; the number of adult equivalents, however, is only two thirds higher.

Conceptually, the best single indicator of whether distribution is improving or worsening over time would probably be the trend in the distribution of lifetime consumption by persons, appropriately discounted. The above rather confusing pieces of information do not permit any conclusions with respect to trends in this variable. Table 3, in the absence of other evidence, suggests constancy in the distribution of consumption among families over 1961–71; the recorded improvement between 1956 and 1961 must be viewed with some caution due to the apparently particularly high underreporting of consumption

TABLE 7

A COMPARISON OF DISTRIBUTION OF INCOME BY FAMILIES
AND BY PERSONS, 1970–71

	Family Income	*Per Capita* Income
Lowest Quintile	3.7	3.9
2nd Quintile	8.2	8.5
3rd Quintile	13.2	13.2
4th Quintile	21.0	21.1
Top Quintile	53.9	53.4
Top 10%	36.9	36.7
Top 5%	24.3	24.5

Source: The distribution of family income is the same as that presented in Table 2. That of *per capita* income is calculated from *FIES 1971*, by using the classification of family income by family size to convert the figures on family income to *per capita* income by family income-family size cells and regrouping according to *per capita* income. For families of a given size and income category, some positive correlation was assumed between size and family income.

322

in the former year. Meanwhile, the variance of family size as between high income and low income families appears to have decreased over time, thus possibly creating a false impression of improving distribution over time or cancelling out what would otherwise have appeared as a worsening.[8] As between 1956 and 1971, the relative family size of high income families compared to low income families decreased; in 1956–57 the top quintile of families by income had 1.55 times as many members as the bottom quintile, while in 1970–71 the ratio was only 1.38. This suggests that income (consumption) distribution may have been moving less favorably than Table 2 (Table 3).

The disproportionate representation of families with either young (<25) or old (≥65) family heads among the poor seems to have increased at least between 1965 and 1970–71, the only two years for which this breakdown is available. Whereas in 1965 they represented only about 14 percent of the lowest quintile, in 1970–71 this share was about 20 percent (Table 5). This factor may have tended to hide some degree of improvement in the distribution of income and consumption. With only two points of time observed, this conclusion is quite tentative.

Price Differences

The share of the population found in urban areas has increased substantially over the period in question.[9] Prices of many key items in the family budget (especially food) are substantially higher in the urban areas, perhaps as much as 25 to 30 percent for Manila;[10] but since many items, including public goods and services, are cheaper in the urban areas, a detailed study would be required before conclusions could be reached as to an overall relative price.

Tentatively, the FIES data would seem to suggest that distribution did not change much over the 15 year period, and that any movement was more likely in a positive than a negative direction. Both the income and consumption distributions show a declining share for the top groups. While the bottom quintile's share of recorded income fell, its share of consumption rose. However, biases resulting from the use of aggregate family income and consumption data seem more likely to have helped generate an artificial improvement than the opposite, so the overall judgement must be quite tentative.

---

[8]As Table 7 indicated, family distribution and *per capita* distribution were quite similar in 1970–71. If the distribution of *per capita* income had been the same in 1965, and the relationship between *per capita* income and size of family the same, then family income distribution would have been more skewed, as was in fact the case.

[9]Although this does not show up in the *FIES* figures, according to which that share actually fell from 33.5 percent of families surveyed in the March 1957 sample to 30.1 percent of those surveyed in the 1971 sample. This was due to changing definitions of "rural" and "urban" over the years; with a fixed definition (and depending on just what it was) the share would increase by perhaps 4.5 percent over this period. (See K. C. Zachariah, "Migration in the Philippines with Particular Reference to Less Developed Regions," mimeo, 1975, Table 4.) Changes in definition are described in the *FIES, 1971* (p. xiii).

[10]A recent study has suggested that the cost of a subsistence consumption bundle is about 70 percent as high in rural areas as in Manila. (See Development Academy of the Philippines, *Measuring the Quality of Life: Philippine Social Indicators,* Development Academy of the Philippines, 1975, p. 11.

A best guess would be that as of 1970–71 the long-run consumption stream of the best-off five percent would involve per adult equivalent consumption about eight times that of the bottom 20 percent.[11] The trend in this variable cannot be assumed necessarily to follow that of single year consumption distribution since changing age structure, family size, debt capacity and other factors could alter the relationship between the two. More intensive analysis will be required to judge its movement.

B. WAGE RATES AND OTHER MICRO-TYPE EVIDENCE ON DISTRIBUTION TRENDS

When wage rates corresponding to low income occupations are rising substantially less rapidly than income per member of the labor force or income *per capita*, it seems a reasonable first presumption that distribution is worsening. Account must, however, be taken of the fact that when the system is undergoing substantial structural change with increase in the share of labor force found in higher skill sectors, the typical wage rate will rise less rapidly than will the average wage for all occupations. The other major factor to be borne in mind is the distribution of income between labor and capital.

The 1960s in the Philippines was a period of dramatically unsatisfactory wage movements, according to most of the recorded statistics. The evidence on declining real wages for farm workers, industrial workers, and some other categories (Tables 8 and 9) is matched by a decreasing labor share in industries reporting to the *Annual Survey of Manufactures*, both the larger scale firms of 20 workers and up and the small ones. (Table 10). For the former, the estimated property share rose from 69.7 in 1956 to 78.8 in 1971. The rise occurred over 1956–63, a period characterized by decreasing real wages (there were further real wage decreases in subsequent periods). For small manufacturers of 5 to 19 workers the reported property share rose from 48.2 to 67.8 percent in these years; again the increase ended by 1964.[12] The wage index of skilled workers in

[11]We assume that the current consumption distribution is the more relevant base from which to judge trends in lifetime consumption. Table 3 indicates that for consumption expenditure in year 1970–71, the ratio was 13.1. For income the ratio was 26.3. But the top five percent of income earners only consumed 7.3 times as much per family as the bottom quintile. The 13.1 ratio cited above is probably the more relevant one for judging the relationship between long-run consumption per adult equivalent of the well-off and the poor. As between the top 5 percent and the bottom 20 percent of families by 1970–71 income, the number of adult equivalents was 46 percent higher for the latter. If anything, the ratio would probably be higher for the consumption distribution, say 1.5. Thus 1970–71 consumption per adult equivalent would be *8.7* times higher for the top 5 percent of families ranked by 1970–71 consumption than for the bottom 20 percent. The comparable ratio (to the previous one) would be lower when longer run consumption is compared, probably falling in the range *7.5–8.5*.

[12]Leonardo Sta. Romana III, "A Study of Trends in Entrepreneurial and Property Income in the Philippines (Tables)" (Tables, III-b and III-c). Particularly characterized by increases in the property share were wood, wooden furniture, printing, rubber (here the sudden jump was from 1956 to 1957), and machinery. Possibly these samples were not equally complete in the various years, although this is not hinted at by the total value added series. Possibly the process involved a decline in imputed income, although it does not appear plausible that this was a major factor since even in 1956 a considerable majority of the employees reported were engaged in the large manufacturing firms, as suggested by the fact that they accounted for 84 percent of the wage bill of all reporting firms.

industrial establishments in Manila and suburbs fell from 123 to 106 over 1956–63 and that for unskilled workers fell from 113.4 to 102.8. It then remained fairly constant over the rest of the 1960s for latter group but fell again sharply to 91.3 for the skilled workers in 1971; both fell further in the rapid inflation of the succeeding years.

TABLE 8

AGRICULTURAL REAL DAILY WAGE

(Prices of 1965)

Years	ILO[a] (1)	Author[b] (2)	Hicks–McNicoll[c] (3)
1950			3.32
1951			3.16
1952			3.69
1953			4.19
1954			4.42
1955			4.45
1956		3.64	3.85
1957	3.84	3.63	3.87
1958	3.80	3.59	3.84
1959	3.85	3.54	3.77
1960	3.68	3.36	3.69
1961	3.49	3.26	3.63
1962	3.41	3.25	3.55
1963	3.43	2.86	3.61
1964	3.03	2.78	
1965	2.93		
1966	2.98		
1967	3.09		
1968	3.04		
1969	2.75		
1970	2.44	2.56	
1971	2.25	2.44	
1972	2.17	2.58	

[a]Estimated by the ILO team in the preparation of *Sharing in Development: A Programme of Employment, Equity and Growth for the Philippines,* ILO, Geneva, 1973, using data from (BAECON) Wage Surveys, or made available directly by [the Bureau of Agricultural Economics] BAECON. Deflation was by the consumer price index for areas outside Manila.
[b]Estimated by the author on the basis of data presented in Bureau of Agricultural Economics, Department of Agriculture and Natural Resources, *Farm Wages 1956/57–1964/65; 1966/67–1967/68 and Urban Wages 1958/59–1963/64,* Bureau of Printing, 1973, Manila.
[c]Hicks and McNicoll, *op. cit.*

Note that our agricultural real wage series tends to parallel those for unskilled urban workers; there was a substantial increase up to some time in the mid-1950s, after which the general trend has been down. But the decline is more marked in the case of the agricultural real wage and no levelling off occurred in the late 1960s as appears for the Manila unskilled manufacturing laborers or the

TABLE 9

INDEX OF REAL WAGES,[a] SALARIED EMPLOYEES AND WAGE EARNERS IN SELECTED NON-AGRICULTURAL INDUSTRIES IN THE PHILIPPINES, BY INDUSTRY DIVISION, 1952–72 (1965 = 100)

Year	All Workers		Mining & Quarrying		Manufacturing		Electricity, etc.		Commerce		Transportation and Communications	
	Salaried Employees	Wage Earners	Salaried Employees	Wage Earners	Salaried Employees	Wage Earners	Salaried Employees	Wage Earners	Salaried Employees	Wage Earners	Salaried Employees	Wage Earners
1952	87.5	89.8	73.9	70.1	96.2	89.8	111.6	91.4	88.2	87.3	79.2	107.9
1953	93.8	95.2	81.6	78.9	100.0	98.6	122.0	92.8	89.4	94.5	87.1	109.5
1954	99.0	101.6	89.5	83.1	98.4	105.0	125.1	103.7	97.6	100.1	94.1	115.0
1955	103.5	105.6	97.6	88.7	102.6	108.7	126.4	104.7	101.1	105.4	97.4	117.6
1956	102.0	104.2	88.3	91.1	105.0	102.3	123.1	95.0	104.7	112.0	99.0	121.2
1957	102.4	106.0	88.0	92.4	103.3	105.6	122.8	104.9	104.0	110.0	105.2	116.8
1958	104.4	103.5	93.8	93.8	102.6	107.6	120.5	101.0	104.6	101.6	110.0	114.3
1959	110.2	108.9	103.0	101.4	105.7	106.8	127.5	104.4	108.3	111.1	114.4	121.2
1960	111.9	110.7	112.5	103.7	103.5	104.5	123.8	105.9	110.2	122.2	111.2	116.3
1961	112.6	109.3	114.6	107.3	103.9	106.4	123.6	101.4	111.0	118.1	109.9	114.1
1962	109.8	104.9	111.9	103.3	102.5	105.5	119.9	96.9	107.9	111.2	106.6	108.9
1963	107.4	100.3	106.1	102.2	103.4	104.3	119.3	93.3	105.9	100.8	104.8	103.8
1964	101.4	96.8	98.6	101.0	100.1	99.7	111.8	91.5	101.0	97.6	98.9	96.8
1965	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1966	99.7	104.7	93.4	102.8	99.7	102.6	116.1	107.4	98.7	102.8	96.8	107.4
1967	95.4	104.2	82.5	110.9	99.7	101.6	119.4	106.9	93.1	101.7	95.0	100.0
1968	97.9	102.4	85.1	111.0	100.6	100.9	126.2	103.4	93.6	97.1	99.9	100.8
1969	100.5	104.6	89.2	115.3	104.3	102.9	125.8	109.5	96.2	95.0	98.2	100.3
1970	91.9	98.3	77.8	103.2	99.4	102.0	112.1	102.4	93.3	91.4	89.0	92.5
1971	86.3	92.7	74.5	101.6	95.4	101.5	98.8	92.2	88.3	87.0	83.6	83.8
1972	83.8	92.8	70.8	99.6	· 92.5	103.1	96.8	91.1	87.3	87.0	81.7	87.9

[a]Includes only money wages, overtime pay and pay for sick leave, holidays and vacations; excludes such privileges as food ration, lodging, recreation, etc. (See *Statistical Bulletin*, December 1973, p. 383.)

Source: Elizabeth Ong, "An Analysis of Non-Agricultural Real Wages in the Philippines," mimeo, 1973. Deflation is by the Consumer Price Index in Manila. Original sources (listed in Central Bank of the Philippines, *Statistical Bulletin*, where the wage series appear regularly) are described as "787 cooperating establishments" (see *Statistical Bulletin*, December 1973, p. 383).

TABLE 10

EVIDENCE ON THE WAGE SHARE IN MANUFACTURING

	All Reporting Establishments	Large Establishments[a]	Small Establishments[b]
	(1)	(2)	(3)
1956	32.2	30.3	51.8
	30.9	29.6	44.0
	27.9	26.6	41.3
	27.5	26.2	41.6
1960	26.7	25.9	36.9
	24.9	24.1	41.9
	22.7	22.0	38.0
	24.0	23.5	32.7
1965	26.6	26.2	33.7
	27.0	26.5	34.5
	24.0	23.2	36.5
	23.6	23.0	35.7
1970	20.4	19.7	34.3
1971	21.7	21.2	32.2

[a] Establishments with 20 workers or more.
[b] Average total employment of establishments with 5–19 workers.
Source and Methodology: Romana, *op. cit.*, Table III-A, III-B and III-C. Originally from BCS, *Annual Survey of Manufactures*. A small labor cost category, "extra benefits", was excluded.

wage earners in most of the sectors included in Table 9 (Commerce is an exception; there the decline for wage workers was of the same magnitude as that indicated by our best guess agricultural wage series—column 2 of Table 8.) Meanwhile the wage series indicate that salaried workers, who also gained during the 1950s, have suffered general and in some cases very substantial declines since then. The decline in most of the real wage series raises the question of whether they can be consistent with the evidence from the family income and expenditure survey data to the effect that incomes of wage earning families as well as of all families were rising during the 1960s.

The consistency or lack thereof between national accounts and FIES data on the one hand, which generally indicate increasing income and consumption levels per family and *per capita* (Tables 2 and 11), and the declining wage series on the other calls for more detailed probing; only for the last inter-FIES period, 1965 to 1970/71, does the disaggregation of FIES data by occupation of household head permit some rough comparisons with the wage series. Changing occupational structure does indeed account for part of the apparent discrepancy: for all families the increase in real income per family, according to FIES, was 4.2 percent. (See Table 12.) If the family income trends for each category over 1965–1970/71 distinguished in Table 12 were applied to their shares of all families in 1963, the calculated income increase is −1.0 percent. In this sense structural change was associated with about 5 percent increase in income per family. Meanwhile (see Table 13) there is a broad agreement between FIES

327

TABLE 11

EVIDENCE ON AGGREGATE INCOME AND CONSUMPTION TRENDS, 1965 TO 1970–71:
NATIONAL ACCOUNTS AND FIES

| | | 1970–71 | | |
	1965	Current Prices	1965 Prices	% Increase, 1965–1970/71
A. Aggregate trends				
1. Personal income *per capita*				
National Accounts:				
Estimate A	592	921	652	10.2
Estimate B	656	889	630	−4.0
FIES	433	647	459	6.0
2. Consumption *per capita*				
National accounts	556	814	577	3.8
FIES	490	776	550	12.3
3. Income per family, FIES	2,541	3,736	2,648	4.2
4. Consumption per family, FIES	2,877	4,479	3,174	10.3

Sources and Methodology: Estimates A and B are based on income data and consumption, tax and savings data, respectively, all from the national accounts sources cited in Table 1. Population figures used are unpublished estimates of T. Ruprecht, made for the ILO mission. In estimating *per capita* values from the FIES data, we assumed average family sizes of 5.87 in 1965 and 5.77 in 1970–71, based on the data of the FIES for those years.

annual family income trends and independent wage series by occupations indicating that:[13]

    (a) white collar workers and professionals suffered substantial real income decrease; the wage series of Table 9 suggests a fall of 10.9 percent and the FIES statistics a fall of 14.4 percent (when the three subgroups distinguished are appropriately weighted); see Table 13.

    (b) blue collar workers in manufacturing registered neither gains nor losses.[14]

Large discrepancies exist in the cases of transport workers, agricultural workers and sales workers, with the wage series indicating a decline in each case and the FIES data constancy or an increase. Part of the discrepancies probably relate to

[13]The two types of data would not be expected to show identical trends since:
(a) FIES data are annual, the wage series monthly (or in agriculture, daily) earnings;
(b) FIES data are family income, wage series refer to individual workers;
(c) wage series exclude fringe benefits; FIES earnings reflect all income (in principle at least); and
(d) wage series are based on a sample of 787 corporations (as of 1973); these would tend to be of above average size; FIES reflects all earners.

[14]The wage series of Table 9 do not include fringe benefits. A test to see whether this biases the series downward over time suggested that it does not. In 1959 the ratio of fringe benefits to basic payroll was 3.03 and in 1969 it was 4.54. (See Bureau of the Census and Statistics, *Annual Survey of Manufactures*, 1959 and 1969, respectively.)

TABLE 12

FAMILY INCOME AND CONSUMPTION TRENDS, 1965–1970/71, BY OCCUPATION OF HOUSEHOLD HEAD
(FIES Statistics)

	1965			Percentage Change, 1965 to 1970–71	
	Income per Family (1)	Consumption per Family (2)	Thousands of Families (3)	Income per Family	Consumption per Family
Professional, technical and related	8,507	8,528	128	< −28.5	< −18.7
Administrative, executive and managerial	11,682	10,675	71	−39.2	−26.0
Proprietors, wholesale and retail	4,885	4,819	138	−15.2	−5.4
Clerical workers	4,694	5,202	185	≈7.3	≈20.2
Sales workers	3,443	3,844	199	0	10.1
Farmers, farm laborers, et al.	1,651	2,030	2,855	5.1	8.9
Workers in mines	3,277	3,077	14	−6.4	9.8
Transport workers[a]	2,561	3,166	214	7.6	2.7
Craftsmen, factory operators, et al.	2,530	2,888	608	1.3	11.7
Other manual workers	2,007	2,601	104	1.9	3.1
Service workers	2,868	3,399	225	8.9	12.8
Unemployed without work experience, or not in labor force	3,085	3,128	379	10.8	7.7
All groups	2,541	2,877	5,126	4.2	10.3

[a]Included mail carriers and messengers in 1970–71; it is not clear whether they were included in 1965 or not. Engineers, desk officers, etc., were included under the heading "Workers in Transport and Communications Occupations" in 1970–71 but in 1965 they were probably under professionals, etc. and clerical. Since the way they were allocated in 1965 is unknown we have left them unallocated in 1970–71, and have indicated the way in which the numbers in the two cited categories are biased.

TABLE 13

EVIDENCE ON INCOME TRENDS BY GROUPS, 1965 TO 1970–71: FIES FAMILY INCOME DATA
AND SELECTED WAGE SERIES FROM OTHER SOURCES

	1965	1970–71		Percent increase 1965 to 1970–71	
		Current prices	1965 prices	Income	Consumption
Occupational groups					
1. Agricultural labor					
(i) Daily wage (Table 9, col. 2)				−12.2	
(ii) Annual income, families whose household head is an agricultural laborer	1,283	2,248	1,593	24.2	11.3
2. Manufacturing labor					
(i) Manufacturing wage earners, monthly earnings[a]				1.7	
(ii) Annual income, families whose household head is craftsman, factory operative, etc.	2,530	3,615	2,562	1.3	11.7
3. Transport workers					
(i) Wage earners, monthly earnings[a]				−12.0	
(ii) Annual income, families whose household head is transport worker	2,561	4,271	3,027	7.6	2.7
4. Commerce					
(i) Wage earners, monthly earnings[a]				−10.8	
(ii) Annual income, families whose household head is sales worker	3,443	4,859	3,444	0	10.1
5. White collar					
(i) Salaried employees, monthly earnings[a]				−10.9	
(ii) Annual income, families whose household head is:					
a) professional, technical etc.	8,507	6,082	6,931	−28.5	−18.7
b) administrative, executive and management	11,682	10,020	7,101	−39.2	−26.0
c) clerical	4,694	7,109	5,038	7.3	20.2
All three—all families	7,257	8,372	5,933	−18.2	
All three—weighted by relative numbers of wage workers in the 1971 BCS Labor Force Survey[b]	6,769	8,176	5,794	−14.4	

[a]Data from Table 9.

[b]The ratios of wage earners/total employed was 93.2, 47.5 and 98.1 for groups (a), (b), and (c)
respectively. Absolute numbers in May 1971 were 547, 77, and 455 thousands. Here the percentages
are applied to the 1965 and 1970–71 totals of the respective FIES.

changes in the inclusions of these categories between the 1965 and 1970–71
FIES. Many other factors could also be involved.[15]

Taking the various statistics at their face value, the improvement of income
distribution registered between 1965 and 1970–71 is a result of relatively

[15]Note that the BAECON data give daily wages. The BCS household surveys indicate no large
changes in hours worked per week for agricultural laborers; unfortunately no data seem to be
available to permit a judgment as to whether weeks worked per year per family might have increased
or not.

greater wage increases (smaller decreases) for persons and families at lower wage levels; this is suggested both by the wage series and the FIES data. Further, there has been an increase in the relative income of farmers vis-a-vis proprietors in other sectors; families whose household heads were agricultural operators had an average increase of 3.2 percent while proprietors in wholesale and retail commerce, for example, registered a decline of 15.2 percent.

While one might well question the validity of such sharp declines in average income as are indicated in Table 13 for families whose household heads are professionals or administrative executive-managers[16] (and conclude that understating of high incomes was particularly severe in the 1970-71 FIES), it must be noted that various independent pieces of evidence point in the same direction. Further, the very rapid advance of middle and higher education in the Philippines, coupled with the relatively slow growth of output characterizing this period would be expected to bring about a decrease in the relative income of the better educated.

C. Conclusions

Distribution of income and consumption by families appears not to have altered much over the period 1956–1970/71 in the Philippines. FIES studies suggest if anything some improvement, while trends in certain wage series (especially the BAECON agricultural wage series) tend to suggest the opposite.[17] A partial reconciliation has been attempted above for the period 1965–1970/71, with the conclusion that the declining wage rates do not constitute strong evidence that distribution did not improve during that period (or that the incomes of poor families did not rise). Structural change has been rather rapid, with an increasing share of the labor force in the higher paying occupations. Only with better knowledge of the relative underreporting of different income and consumption groups and of the strengths and weaknesses of the cited wage series can a satisfactory picture be painted.

[16]Note that, with these groups expanding very rapidly (presumably faster than before), an increasing share of persons in them were probably young and low on the income ladders characterizing their occupational categories; some of the average income decline is presumably due to this factor, and is therefore somewhat illusory. But this would not likely explain the full declines.

[17]Since many industrial workers and most white collar workers have above average income the decline in their wages would be suggestive of decreasing inequality.