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Type of Age Reporting Errors in the Census Data of Indonesia

Introduction

IT is an irony of the present day that precisely in those developing countries where studies and analysis of demographic phenomena are of paramount importance, there is paucity of demographic data of reliable quality and adequate coverage. For example, it has been observed that in most of the countries in the ECAFE region, data on age-sex distribution of the population are not available by single years of age but only in quinquennial or decennial groups though it is well recognised that single year age data are needed for a variety of demographic analysis. Even when such data are available, they are loaded with a variety of errors so that they are useless without appropriate adjustments and corrections. The commonest type of errors are omissions at the time of enumeration, digit and age preferences in age reporting and ignorance of actual age. In Indonesia, India and some other countries in the ECAFE region these kinds of errors are so large that even after grouping into five-year or ten year intervals, these errors continue to persist.

The patterns of age reporting errors are not the same for all the countries and they vary from country to country. Before the data are put into use, one has to evaluate the data and identify the types of age reporting errors. An attempt is made here to evaluate the sex-age distribution of

1961 and 1971 censuses of Indonesia in order to identify the types of errors in the data.

Indonesian Censuses

The first Indonesian census, in a scientific sense was taken on October 31, 1961 and the second, in 1971. Single years of age data are available on the basis of one per cent sample for the 1971 census and are given in Appendix II. For the 1961 census the age sex data are available only in quinquennial intervals and are given in Appendix I. Usually, the age data are subjected to four types of errors: (a) digit preference error, (b) age preference error, (c) estimation error and (d) actual omission. We shall investigate the extent to which these types of errors are prevalent in Indonesian census data.

Erorrs in (0-4) and (5-9) Age Groups

It has been the common observation that in most of the developing countries there has been gross underenumeration of children aged 0-4 either due to actual omission of children or due to wrong reporting of the ages of children. The 5-9 age group is also at times overenumerated at the cost of neighbouring age groups or sometimes correctly enumerated. It may be mentioned that omissions will affect the age groups where it occurs whereas mis-reporting of ages will affect the adjacent age groups also. An idea of missing of young children and mis-reporting of the ages can be had from the following table which shows percentage distribution of children aged 0, 1, 2, 3 and 4 to the total of the 0-4 age group for the 1971 census.

TABLE 1-PERCENTAGE DISTRIBUTION IN (0-4) AGE GROUP AND SEX RATIOS

Age	*0*	1	*2*	*3*	*4*	*(0-4)*
Male	13.00	21.24	21.73	21.34	22.69	100.00
Female	13.01	20.68	21.96	20.99	23.36	100.00
Total	13.01	20.96	21.84	21.17	23.02	100.00
Sex Ratio	101.5	104.2	100.5	103.2	98.6	101.5

In data without any kinds of errors one would expect a decreasing trend in the percentage distribution as age advances by virtue of mortality. . But the pattern observed for Indonesia is quite distinct. There seems to be net underenumeration of both male and female children aged 0 because of very low percentages noted. A small variation in the propora-tion at ages 0, 1, 2, 3 and 4 may be due to substantial improvement in the child mortality in the immediately preceding 5 years. There could have been some shifting errors as children aged 0 reported as aged 1 or 2 or even 3. But the very low percentage observed for male (13.00) and female (13.01) children of aged 0 suggest that there was significant omission of children aged 0. This is an important observation for Indonesia because even for India, Ceylon and Nepal the percentage of children aged 0 to (0-4) group is near about 20. One may infer that net omission of children aged 0 in Indonesia is quite large as compared with some other Asian countries. Even the trend in the sex ratios shows divergent results. It is an universal experience that male births outnumber female births and in the early ages the sex ratio is near about 104-106. The very low sex ratio observed at ages 0, 2 and 4 and also for the 0-4 age group indicates omis sion of male children and largest omission at age 4. Incidentally the sex ratio for age group (0-4) in the 1961 census (98.6) appears to very low and the omission could be more in the 1961 census as compared with 1971 census.

Another evidence of underenumeration of infants can be obtained by calculating the number of births that would have occurred by using the formula, B = Number of births occurring in 1970-71 = $\frac{P_0^{1971}}{I^{-2/3\,IMR}}$ where

Po^{971} is the population aged 0 in the 1971 census and IMR is the infant mortality rate in 1970-71, There is no reliable figure of infant mortality rate available for Indonesia. The Third National Socio-Economic Survey[1] gives an infant mortality rate of 72.08 per 1000 live births for Java-Madura which is quite a low estimate. IMR for East-Java was estimated to be 176 around I960.[2] In the absence of reliable figures it may be

1. Sanusi Djali, "Fertility and Mortality in Java and Madura," *Seminar paper submitted to IIPS*, 1972-73, p. 9.
2. N. Iskander, *Some Monograph Studies on the Population in Indonesia,* Lembaga Demografi Fakultes Ekonomi Universitas Indonesia, Salemba 4, Djakarta, p. 112.

assumed that the IMR for Indonesia could be in the range of 150 to 200 per 1000 live births. The crude birth rate on the basis of the above formula by taking IMR as 150 and 200 for both the sexes comes out to be 23 and 24. This estimate of crude birth rate is quite low as compared with other estimates which are in the range of 40 to 47. It can easily be shown that an error of 15 to 20 per cent in the estimate of IMR will produce only an error of 1 to 3 per cent in the estimated number of births. Taking the survival ratios corresponding to $e°_0$ of 40.55 for females and 39.71 for males from the Coale and Demeny Regional West Model Life Tables, the validity of which we shall discuss later, and projecting the population aged 4, 3, 2 and 1 backwards, the birth rates have been found to be 56.6, 50.1, 43.5 and 39.4 corresponding to the population aged 4, 3, 2 and 1 respectively. This suggest that the population aged 4 and 3 are overenumerated to a large extent and the population aged 2 appears to be correctly enumerated. Therefore there are shifting errors in the age group (0-4) and also a considerable omission of infants has been observed.

The relative accuracy of 0-4 and 5-9 enumerated age groups can "be tested by calculating the crude birth rates by the reverse survival ratio method. The application of this method needs the knowledge of an approximate level of mortality. Assuming that the quasi-stable population model is applicable for Indonesia, the Coale and Demeny method has been used here for the estimation of mortality level from the knowledge of cumulative proportion of population at age x and the rate of growth of population. The birth rate for female population comes out to be 43.8 corresponding to cumulative proportion of population at age 35 and an exponential rate of growth of 0.02091, and the birth rate for both sexes comes out to be 45.6. This estimate of birth rate is close to the United Nations estimate[3] of 48.3 for the period 1965-70, Kozo Ueda's estimate[4]. of 47.0 in 1964 and Iskander's estimate[5] of 47.6 in 1960. The female expectation of life comes out to be 40.55 years. Taking e_0 of 40.55 years for females and 39.71 years for males during 1966-71 and 37.50 years for females and 37.30 for males during 1961-66, the crude birth rates obtained

3. United Nations, *Demographic Year Book,* 1970, Table 3, p. 121.

4. Kozo Ueda, *"Population Increase in Indonesia",* Central Bureau of Statistics, Statistical Research and Development Centre, Djakarta, 1965.

5. N. Iskander, *op. cit.,* p. 137.

by; the reverse survival ratio method for the age groups 0-4, 1-4 and 5-9 have been found to be 43.0, 46.7 and 52.0. This suggests that (5-9) age. group is overenumerated and (0-4) is underenumerated. The birth rate on the basis of 1-4 group may be taken to be nearly correct, in which case there are sufficient ground to believe omission of children aged 0.

Errors in the Segment 10-69

Now let us examine the age span 10-69 and investigate the types of errors that are prevalent in this segment. Table 2 gives the percentage

TABLE 2-PERCENTAGE DISTRIBUTION BY AGE GROUP AND SEX

Age group	*1961*		*1971*	
	Male	*Female*	*Male*	*Female*
0-4	17.82	17.57	16.56	15.80
5-9	16.18	15.65	16.43	15.44
10-14	9.09	7.91	12.57	11.47
15-19	8.07	7.93	9.68	9.55
20-24	7.27	8.89	6.10	7.32
25-29	8.05	9.94	6.92	8.32
30-34	7.40	7.56	6.29	7.03
35-39	6.94	6.05	6.90	6.75
40-44	5.10	4.93	5.15	5.03
45-49	4.03	3.60	4.12	3.74
50-54	3.47	3.53	3.24	3.24
55-59	1.83	1.63	1.84	1.76
60-64	2.16	2.16	1.77	1.98
65-69	0.84	0.83	0.92	0.97
70-74	0.13	0.87	0.84	0.95
75+	0.89	0.83	0.65	0.65
Not stated	0.13	0.12	0.01	0.01
Total	100.00	100.00	100.00	100.00

age distribution by sex in quinquennial intervals in 1961 and 1971 censuses.

The proportionate age distribution of males and females for 1961 and 1971, shown in Figures 1 and 2, indicate some difference in the pattern of

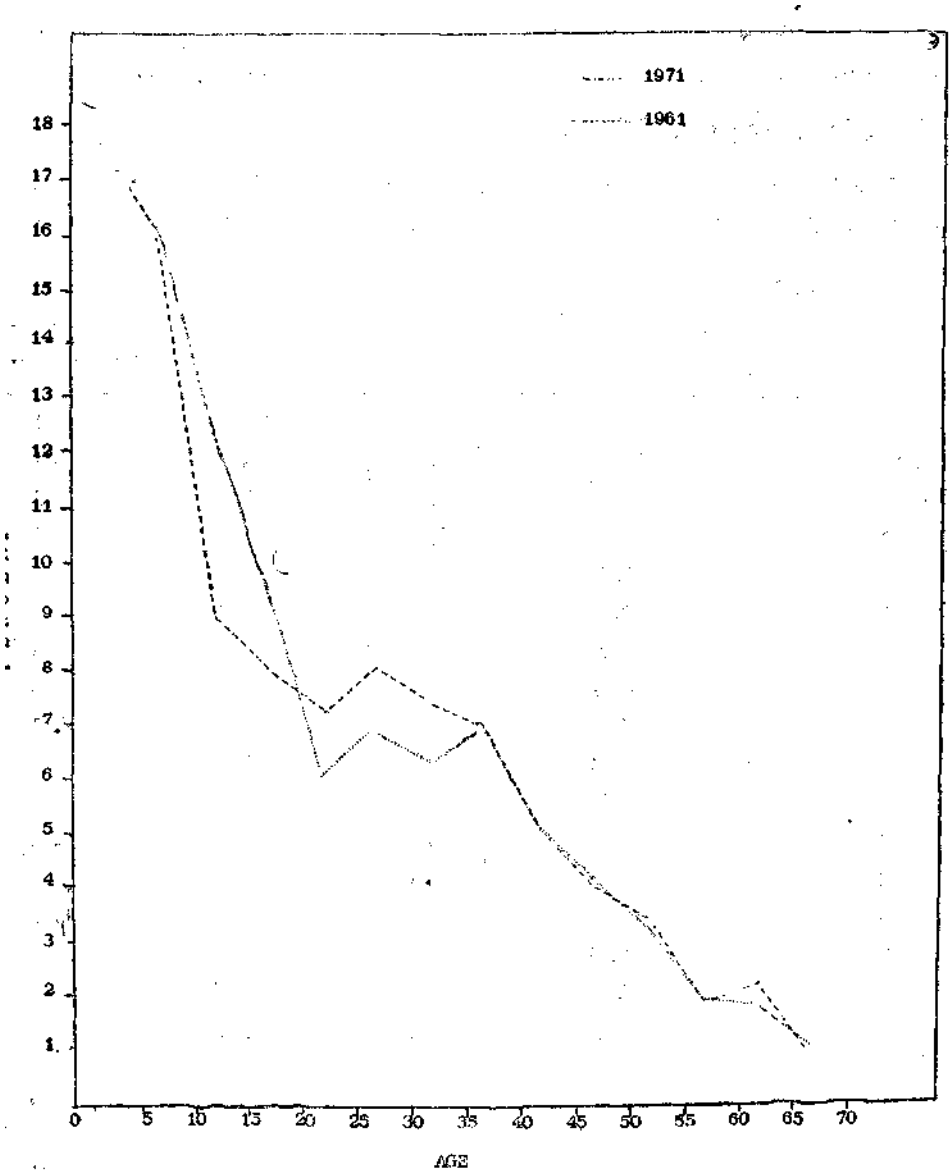

Fig. 1, Proportionate age distribution of males reported by the Indonesian Censuses of 1961 and 1971.

age misreporting in the two censuses. Also Fig. 3, which gives census survivorship rates of males and females from age x to $x + 5$ in 1961 to age $x + 10$ to $x + 15$ in 1971 shows many ups and downs indicating reporting

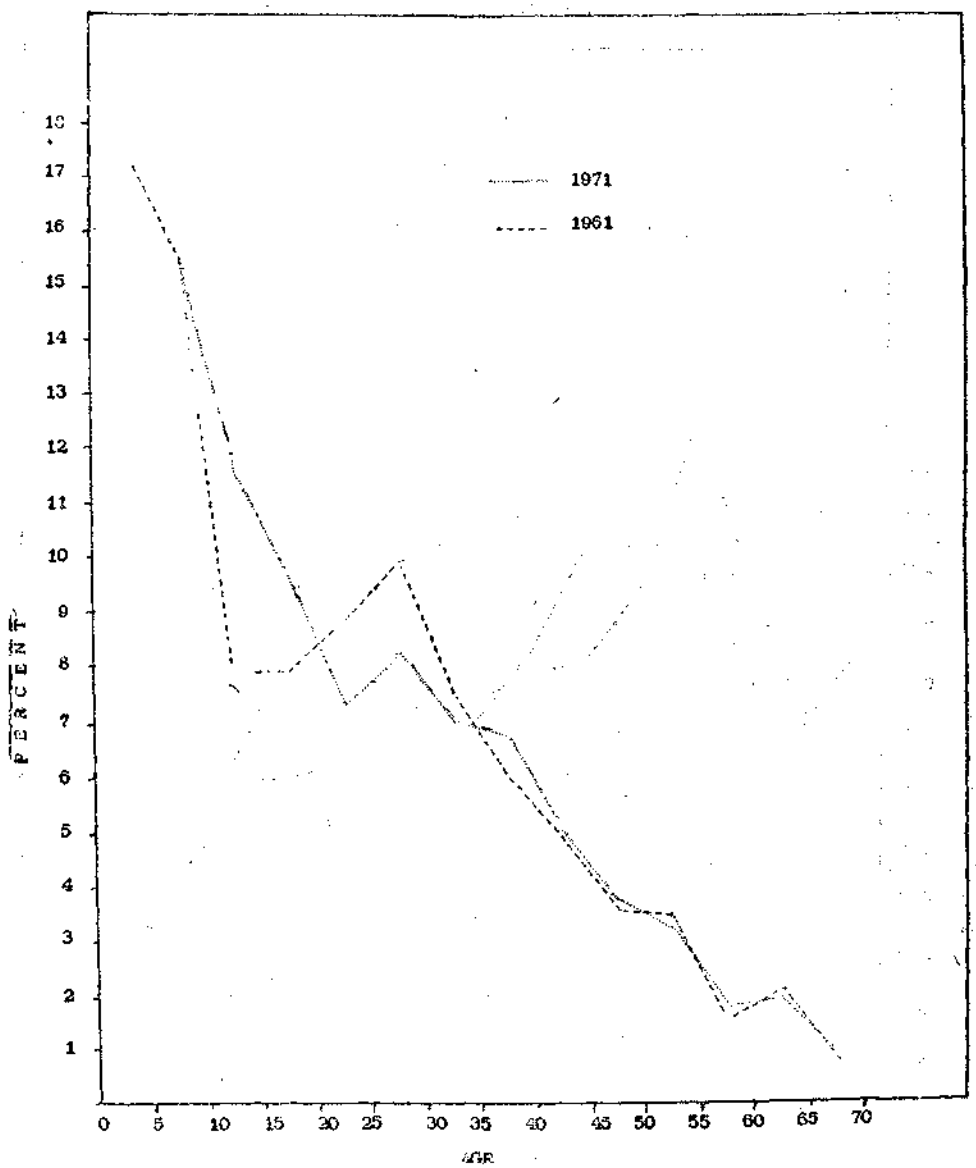

Fig. 2. Proportionate age distribution of females reported by the Indonesian Censuses 1961 and 1971.

errors in the data. There has been sudden "dip" in 10-14 and 15-19 age groups for males and females in the 1961 census. Some demographers had been of the opinion that the "hollow" age groups 10-14 and 15-19 in the 1961 census was the result of wartime marriage postponements, sepa-

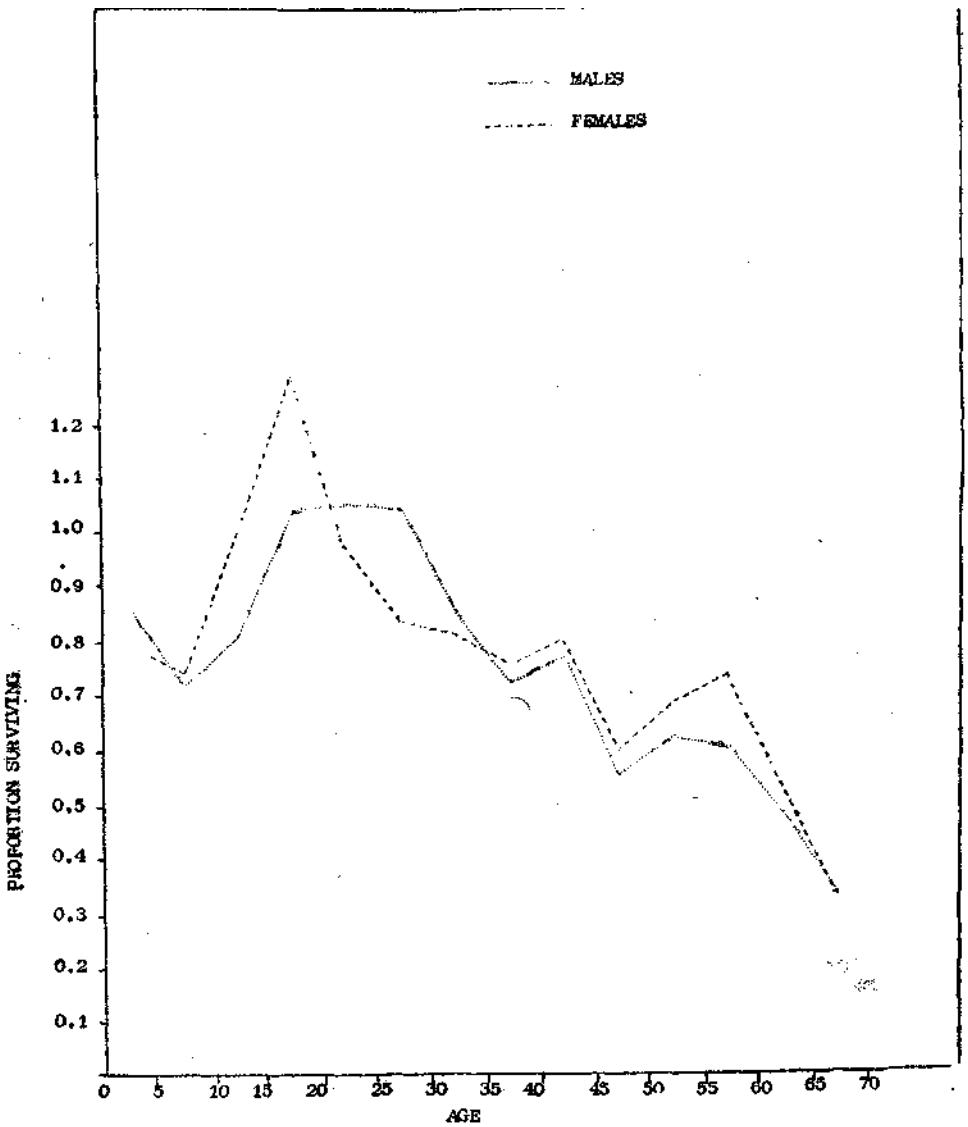

Fig. 3. Census survivorship rates of males and females from Age *x* to *x*+5 in 1961 to Age *x*+10 to *x*+15 in 1971 for Indonesia.

ration of spouses and higher rates of infant mortality all during the forties. But the same "hollow" has appeared again in the 1971 census. Even for some African countries the "dip" in these age groups had been noted when these countries were not involved in wars, revolution or such incidents[6]. This suggests that there may be some cultural reasons responsible for such age distortions. There is a tendency to overestimate the ages of girls in the age group 10-14 years who have passed puberty, especially if they are married, and also a tendency to underestimate the ages of girls 10-14 years who have not reached puberty, causing a net forward and backward shifting errors. These cultural reasons have been observed for India, Ceylon and Nepal. Also we may note distortions for females in the age groups 15-19, 20-24, and 25-29. A tendency toward overestimation of females in these age groups, causing net transfers across ages 15, 20, 25 and 30, and causing deficits at 10-14 and 15-19 and excessive proportions at 25-29 and 30-34 have been observed in the case of Indonesian data. This type of age distortions has been African-Asian type[7].

A similar pattern of age distortion is evidenced with regard to males. Heaping in the 5-9 age group results from the desire to meet elementary school entrance requirements. Also a previous history of mandatory servitude practices in the rural areas for adult males causes the 20-24 year old group to report themselves as being younger[8].

The pattern of age misreporting for females from 30 onwards was found to be similar in the 1961 and 1971 censuses. For males a relatively smoother slope from age 35 onwards has been found in both the censuses except in the age group (60-64) in 1961. While comparing the percentage distribution of population in broad age groups in 1961 and 1971, one can notice slight increase in the younger ages during the latest census and this could be due to some improvements in the enumeration, especially of infant and fall in mortality, especially infant and childhood mortality. Another interesting deviation from the normal pattern of age distribution is the excess of males over females aged 45 years and over, while normally the reverse would be observed.

6. *Ibid.*, p. 16.

7. United Nations, Manual IV, *Methods of Estimating Basic Demographic Measures from Incomplete Data*, New York, 1967, p. 21.

8. N. Iskander, *op.* cit.,p. *17.*

Digit and Age Preference Errors

In a correctly enumerated closed population one would expect a decreasing trend as age advances but the single year age data of 1971 for Indonesia reflects a different picture. The age data show many ups and downs from one age segment to another. It is very difficult to get the exact age of the respondent, especially among lliterate population, because of ignorance on the part of respondents to whom the exact knowledge of their ages is not important. Also due to many cultural reasons, very strong preferences for certain digits and certain ages have been noted. Data on ages were supplied by the head of household, or the persons concemed. However, in most cases it is the enumerator who estimates the ages of the respondents. Therefore, in addition to the digit preference and age preference errors, there, are estimation errors or what we call random errors in the data.

In order to study the preference for particular digit Myer's Index has been calculated for single year age data of 1971. Since single year age data are not available for 1961 census, the Index could not be calculated. The blended percentages gives the degree of attraction and repulsion of

TABLE 3-DEVIATIONS OF BLENDED PERCENTAGE FROM 10 AT EACH DIGIT AND MYER'S INDEX, 1971

Digit	*Males*	*Females*
0	11.81	14.28
1	-2.58	-2.73
2	-2.74	-3.24
3	-3.82	-4.44
4	-4.34	-4.64
5	10.75	11.11
6	-1.65	-2.01
7	-2.26	-2.63
8	-1.16	-1.24
9	-4.01	-4.44
Myer's Index	45.12	50.77

certain digits. Digits 0 and 5 are the most preferred digits. It may be noted that preference for digits 0 and 5 together accounts for nearly a half of the total age reporting against the one fifth expected. Digits 1, 2 and 3 have shown strong repulsion and so also digits 6, 7 and 8. The Myer's Index works out to be 45.12 for males and 50.77 for females, which indicate that the age reporting is very poor in Indonesia. Incidentally, it is observed that male age reporting is slightly better than the female. The attraction for digits 0 and 5 and repulsion for digits 1, 2, 9, and 8 have been observed for some of the Asian countries like, India Ceylon, Burma and Nepal[9].

The differential error in age reporting can also be detected by means of a study of the age ratio of the single year data or by 5-year interval age groups. The age ratios for single years by sex for the Indonesian data of 1971 brings out the gross errors in the age reporting (Appendix III). The very high ratios at ages ending in digits 0 and 5 excepting at age 5 indicate a very strong pull for these ages at the cost of adjacent ages. In the younger age group 0-9 high age ratios both for males and females have been observed at age 1, 4 and 8. This also supports our earlier statement that there is net transfer of children from age 0 to age 1. Another important finding that can be noted from the single year age ratios is that wherever the age ratios are greater than 100 we find that male age ratios are lesser than female age ratios with few exceptions. This suggests that male age reporting is better than the female. Even the sex ratios by single years of age shows a deviating pattern in 1971. In data with very little errors one would expect a high sex ratio of 104-105 in 0-4 age group and reaches 100 by adult ages for which the ratios become progressively favourable to females. But there is no systematic trend in the sex ratios of the single years of age in 1971 and there are ups and downs indicating large reporting errors. As noted earlier there has been systematic "heap-ings" at digits ending in 0 and 5.

The United Nations suggest an Index called the 'joint score' (JS) which combines sex ratio score (SRS), male age ratio scores (MRS) and female age ratio scores (FRS)[10]. If the ages are correctly reported, these ratios

9. K. V. Ramachandran, "An Evaluation and Adjustment of the Basic Demographic Statistics of Burma, Ceylon, Nepal and India," DTRC, 1969 (Mimeographed).

10. United Nations, Manual II, *Methods of Appraisal of Quality of Basic Data for Population Estimates*, New York, 1955, p. 42.

will fluctuate around 100 such that the mean of absolute deviations of these ratios from 100 will be zero for good data and age ratio scores Will be large if age reporting is defective.

TABLE 4--AGE RATIOS AND SEX RATIOS BY QUINARY AGES FOR INDONESIA, 1961 AND 1971

1961				*1971*		
	MAR	*FAR*	*SR*	*MAR*	*FAR*	*SR*
0-4	-	-	98.6	-	-	101.5
5-9	102:2	122.8	100.6	112.8	113:3	103.0
10-14	75.0	67.1	111.9	96.3	91.8	106.2
15-19	98.7	94.5	98.9	103.7	101.7	98.2
20-24	90.2	99.4	79.6	*73.5*	81.9	80.7
25-29	109.7	120.9	78.7	111.7.	116.0	80.5
30-34	98.7	94.5	95.2	91.0	93:3	86.6
35-39	111.1	96.9	111.6	120.6	111.9	99.0
40-44	92.9	102.1	100.6	93.6	95.9	99.3
45-49	94.1	85.1	100.8	98.l	90.4	106.7
50-54	118.2	135.1	95.4	108.7	117.7	97.0
55-59	65.1	57.2	109.6	73.5	67.7	101.2
60-64	1618	176.2	97.3	128.5	144.4	87.0
65-69	56.5	54.5	99.4	70.1	66.6	91.3
70-74	-	-	92.8	-	-	86.3
ARS	19.3	23.7		14.6	16.7	
SRS			10.8			7.3
JS	75.4			53.2		

Joint score is obtained by adding the male age ratio score and the female age ratio score to three times the sex ratio score. Joint score gives an overall picture of the quality of age reporting. Higher value of JS indicates that the data contain all types of errors. For Indonesia the JS for 1961 and 1971 censuses are 75.4 and 53.2. In general when JS exceed 60.0 ttie quality of data is considered to be poor. It may also be noted that there

has been improvement in the quality of data during 1961-71 and the 1971 census age-sex data appeals to be better than the 1961 census data.

Besides digit preference errors there are some age preference errors also in the Indonesian data. Table 5 gives the preferences of ages as reported in 1971 census. If we consider age 10 onwards, there was an excess of persons of age 35 for males and age 30 for females. Ages 10 and 30 for males and ages 25 and 35 for females have been the next preferred ages. Such preferences for ages have been observed in other countries as well. For instance, in some countries the return of population with age12 is abnormally high. This is due to the fact that labour force and economic activity status are to be recorded in detail only for those above 12 years old and to avoid work the census enumerators return the ages of quite a few of the people as 12[11]. In India, according to the 1961 census more than 4 per cent of the people reported their age as 30 and this number was the highest among all ages including the young age group 0-10.

TABLE 5-RANKING BY AGES-INDONESIA 1971 (10-69)

Rank	1	*2*	*3*	*4*	*5*	*6*	7	8	9	*10*
Males	35	10	30	40	12	25	15	45	18	13
Females	30	25	35	40	20	10	12	18	15	45
Total	30	35	25	10	40	12	20	15	18	45

Conclusion

Our evaluation of the age sex data of 1961 and 1971 censuses suggests that in general the quality of age reporting is poor in the Indonesian censuses. The population aged 0 for males and females was appreciably lower in the 1971 census and this indicates considerable omission of infants. It seems that the 0-4 population is underenumerated and the 5-9, overenumerated. There has been a "hollow" in 10-14 and 15-19 age groups in both the 1961 and 1971 censuses. There is a tendency toward overestimation of females in the 15-19, 20-24 and 25-29 age groups, causing net

11. K. V. Ramachandran, "Techniques of Population Projections", Demographic Training and Research Centre, 1968 (Mimeographed), p. 15.

transfers across ages 15, 20, 25 and 30, deficits in 10-14 and 15-19 and excessive proportions in 25-29 and 30-34 age groups. There have been systematic heaping at ages ending in 0 and 5 at the cost of neighbouring ages. There are also age preference errors in the data, in the 1971 census, age 30 was the most preferred age. In general there has been an improvement in the quality of age reporting during 1961-71. The male age reporting is found to be slightly better than the female.

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APPENDIX I

POPULATION BY SEX **AND** AGE **BY** FIVE YEAR AGE GROUPS, INDONESIA 1961

Age	Males	Females
0-4	8461949	8580361
5-9	7683534	7639422
10-14	4318543	3860869
15-19	3834117	3874058
20-24	3452362	4338603
25-29	3820670	4852053
30-34	3512947	3690049
35-39	3297872	2955705
40-44	2421984	2407629
45-49	1913300	1758685
50-54	1645707	1724640
55-59	870507	794539
60-64	1027003	1055857
65-69	401354	403928
70-74	394376	425099
75-79	144361	142232
80-84	126443	150021
85+	106943	114356
Not Stated	56882	59869
Total	47493854	48824975

APPENDIX II

POPULATION BY SINGLE YEARS OF AGE AND SEX, INDONESIA 1971

Age	*Males*	*Females*	*Age*	*Males*	*Females*
(1)	(2)	(3)	(4)	(5)	(6)
0	1255319	1237078	40	1706748	1847049
1	2049869	1966604	41	448506	452372
2	2097562	2087630	42	376347	304364
3	2060354	1995887	43	283841	270680
4	2189918	2221044	44	188090	150451
0-4	9653022	9508243	40-44	3003532	3025816
5	1957426	1873299	45	1305180	1265099
6	1987987	1953913	46	377282	318415
7	1977090	1889451	47	239443	217862
8	1959772	1860378	48	282440	271309
9	1695150	1717689	49	194365	175733
5-9	9577425	9294730	45-49	2398710	2248418
10	1891847	1762365	50	1098514	1242697
11	1240626	1221908	51	289125	294603
12	1652154	1514858	52	198591	168125
13	1281364	1199908	53	163157	133127
14	1260309	1202547	54	138220	108417
10-14	7326300	6901586	50-54	1887607	1946969
15	1456801	1324866	55	555678	580040
16	1077091	10.61156	56	187658	184384
17	1100630	1174700	57	127716	105234
18	1282952	1413198	58	117606	111659
19	725497	774455	59	85258	80031

(1)	(2)	(3)	(4)	(5)	(6)
15-19	5642971	5748375	55-59	1073916	1061388
20	1351140	1791347	69	671413	836080
21	640606	730589	61	149521	154426
22	580624	694929	62	87527	87048
23	522815	573575	63	82511	70618
24	460592	615071	64	43072	40713
20-24	3555777	4405511	60-64	1034044	1188885
25	1548036	2190158	65	321458	376342
26	639160	783744	66	74137	74733
27	668986	756261	67	47345	45019
28	676005	751582	68	48717	52792
29	501015	527467	69	43149	36843
25-29	4033202	5009212	65-69	534806	585729
30	1837226	2360546	70	338014	418942
31	564710	602377	71	94760	92525
32	548266	588946	72	28142	30406
33	392389	370540	73	21474	18573
34	321663	307584	74	9028	931 2
30-34	3664254	4229993	70-74	491418	569758
35	2046675	2122113	75+	378886	391118
36	618154	636396			
37	481507	451948			
38	515778	535623	Not Stated	3975	3890
39	357207	315048			
35-39	4019321	4061128	Total	58279166	60180679

APPENDIX III

AGE RATIO AND SEX RATIO BY SINGLE YEARS OF AGE FOR INDONESIA, 1971

	Age Ratio				*Age Ratio*		
Age	*Male*	*Female*	*Sex Ratio*	*Age*	*Male*	*Female*	*Sex Ratio*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
0	-	-	101.5	36	48.9	49.4	97.1
1	122.3	118.3	104.2	37	84.9	77.1	106.5
2	102.1	105.4	100.5	38	122.9	139.7	96.2
3	96.1	92.6	103.2	39	32.1	26.4	113.3
4	109.0	114.8	98.6	40	423.6	481.4	92.2
5	93.7	79.7	104.5	41	43.1	42.1	99.1
6	101.1	103.9	101.7	42	102.7	84.2	123.6
7	100.2	99.1	104.6	43	100.5	119.2	104.8
8	106.7	103.1	105.3	44	23.7	19.6	125.0
9	88.0	94.8	98.7	45	461.7	539.6	103.1
10	128.9	119.9	107.3	46	489	42.9	118.4
11	70.0	74.6	101.5	47	72.5	73.8	109.9
12	131.0	125.1	109.1	48	130.2	137.8	104.1
13	87.9	88.3	106.8	49	28.1	23.2	110.6
14	92.1	95.3	104.8	50	454.4	528.4	88.4
15	124.7	117.1	1100	51	44.6	41.7	98.1
16	84.2	84.9	101.5	52	87.8	78.6	118.1
17	93.2	95.0	93.7	53	96.8	96.3	122.6
18	1405	145.0	90.7	54	38.4	30.4	127.4
19	55.1	48.3	93.7	55	341.0	396.2	95.8
20	197.8	238.0	75.4	56	54.9	53.8	101.7
21	66.3	58.8	87.7	57	83.6	71.0	121.3
22	99.8	106.5	83.5	58	110.4	120.5	105.3
23	100.4	87.5	91.2	59	21.6	16.9	106.5
24	44.5	44.5	74.8	60	571.9	713.2	80.3
25	281.5	313.1	70.7	61	39.4	33.4	96.8

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
26	57.6	53.2	81.5	62	75.4	77.3	100.5
27	101.7	98.5	88.4	63	126.3	110.5	116.8
28	115.6	117.1	89.9	64	21.3	18.2	105.7
29	39.8	33.9	95.0	65	548.5	651.9	85.4
30	344.8	417.8	77.8	66	40.2	35.5	99.2
31	47.3	40.8	93.7	67	77.1	70.6	105.2
32	114.5	121.1	93.1	68	107.6	128.9	92.3
33	90.2	82.6	105.8	69	22.3	15.6	117.1
34	26.4	24.7	104.5	70	490.2	647.7	80.7
35	435.5	449.6	96.4				