

COMPONENTS OF CHANGE IN THE SIZE OF THE
PHILIPPINE LABOR FORCE, 1958-1968

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The unavailability of comparable data for at least two points in time exercised the greatest constraint on our procedure in this discussion of components of change in the labor force. For instance, data from the 1960 special report on fertility and labor force characteristics and data in 1968 (NDS)² are tabulated in a relatively comparable manner. So far, these sources represent the only years when information on labor force and employment is given in greater detail. BCSSH data have quite a wide coverage but do not have the kind of detail that was first presented in the 1960 special report. In setting up tables using NDS data, these 1960 tables were used as pattern although some more detail was introduced, such as the use of the urban-rural classification. Trends from 1960 to 1968 could thus have been studied. However, the dissimilarity of circumstances under which the two sets of data were obtained precludes the study of change using the two sources of data together. Hence, we are limited to the study of change in only one area — the size of the labor force from 1958 to 1968. Even then, the results of this paper should be treated as tentative, considering the adjustments that were made and the assumptions used. Data utilized in this paper are not available by any geographic division (e.g. urban-rural) so that our analysis is limited to the total labor force and its classification by sex.

The method utilized here (a combination of cohort and component analyses) involves factoring the change in the size of the labor force during a particular time interval into the following components: 1) deaths; 2) migration; 3) labor force entries; and 4) labor force retirements. Mortality is estimated by applying a five-year mortality rate (derived from an appropriate life table) to the average population during the selected central quinquennium. Migration is obtained as a residual, being the difference after decrements due to mortality have been

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deducted from the total change in the population ten years old and over between 1960.5 and 1965.5. The rates of net entry and not retirement in each cohort correspond to the change in the activity rate of each cohort during the central five-year period. These rates are applied to the average number of each cohort to arrive at the actual numbers of net entries (C) and net retirements (D). C_1 and D_1 , the hypothetical numbers of entries and retirements (hypothetical, due to the assumption of *unchanging* rates of entry and retirement) are taken as corresponding to the differences in the activity rates of successive age groups (column 9 of both Tables 2 and 3) in 1960.5, the beginning year of the central quinquennium. Entries and retirements resulting from changes in the net entry and retirement rates (C_1 and D_1 , respectively) are taken as residuals ($C-C_1$ and $D-D_1$).

The breakdown of change in the labor force into components serves to isolate the effect of each factor and gives us an idea of the magnitude of each component's contribution to total change in the size of the labor force. As this kind of analysis provides more detailed information with regard to change in the labor force, it serves as a better basis for further studies (such as labor force projections) than a time-series study.

Durand and Holden¹ apply this analysis not only to the total labor force but also to its agricultural and nonagricultural sectors, using rural-urban data as approximations to these sectors. The analysis is also carried out by major industry group. Natural increase of the population ten years old and over and of the labor force are projected by industry group for 1950 to 1955 and 1960 to 1965 and comparisons are made with the figures obtained using component analysis for the intercensal interval 1950 to 1960.

The basic data needed in the analysis include the following: 1) a classification by sex and age of the population at two census or census-type survey dates; 2) a corresponding classification by sex and age of labor force, also at two dates; and 3) a mortality function derived from a life table which would be representative of the mortality experience of the country during the time interval under consideration.

¹ John D. Durand and Karen C. Holden, *Methods of Analysing Components of Change in Size and Structure of the Labor Force with Application to Puerto Rico* (Philadelphia: University of Pennsylvania, 1969).

The Procedure

Data were derived from three major sources, namely: 1) the 1956 and 1958 BCSSH bulletins; 2) the 1960 special report on fertility and labor force characteristics; and 3) the preliminary tables set up from the 1968 National Demographic Survey. The mortality function m_x used here was computed from life table values given in the Keyfitz and Flieger book.¹

Population and labor force figures for the starting date of 1958 were derived indirectly. This procedure was dictated by necessity as no data on population by five-year age groups were available in 1958. BCSSH data on employment status by sex have consistently been published in very broad age groups (10-24, 25-44, 45-64, 65 and over) since October 1956. The only exception to this was the May 1956 survey, where data were available in more detailed age groups but which shall not be utilized, however, in view of the inherent shortcomings embodied in first surveys. Data for the end date of 1968 were obtained from tables organized using data provided by the National Demographic Survey. The computer was utilized in this process.

To obtain the population by five-year age groups in 1958, we first computed the joint scores of data for 1956, 1960 and 1968. This was done to assess the quality of the age and sex distributions in the said years.² Based upon the information provided by this procedure,³ it was decided to utilize the age distribution of 1960. The other steps in the computations are summarized as follows:

A. Computation of population for 1958

The 1960 percentage distribution of population was used

¹ Nathan Keyfitz and Wilhelm Flieger, *World Populations An Analysis of Vital Data* (Chicago: University of Chicago Press, 1968), p. 663.

² A joint score (age-accuracy index) is one of the indices used to measure the accuracy of age statistics from one census to another. It is also known as the United Nations Secretariat method and consists in the computation of sex ratios for data reported by five-year age groups. For a more lengthy discussion, refer to: United Nations, *Methods of Appraisal of Quality of Basic Data for Population Estimates* (New York: United Nations, 1955), pp. 42-43. United Nations, "Accuracy Tests for Census Distributions Tabulated in Five-Year and Ten-Year Groups," *Population Bulletin*, no. 2 (October, 1952), pp. 59-79.

³ Joint scores obtained are as follows: 1956-43.2; 1960-26.2; and 1968-40.6.

as weights and applied to the 1958 population within each 20-year broad age group¹ to obtain a population distribution by sex and 5-year age groups in 1958. By this procedure, known totals in 1958 by 20-year age groups were thus maintained.

B. Computation of participation rates in 1958

The ratio of 1958 to 1956 participation rates was computed for each 20-year age group. Assuming that these ratios held for the finer age groups within the 20-year age group, we applied these ratios to the detailed participation rates of 1956 to obtain adjusted rates in 1958. Since participation rates in 1956 were given by 5-year age groups only up to age 24 (and by 10-year age groups from ages 25-64), we assumed that the 10-year participation rates applied to both 5-year age groups within the said 10-year age category. This assumption is perhaps plausible considering the fact that within ages 25-64, participation rates do not deviate very much, especially for men. This may, however, not be as true for women, and thus could be a possible source of error here.

C. Obtaining labor force figures for 1958¹

1. The 1958 participation rates (as computed in B above) were applied to the 1958 population (as computed in A above).

2. As 1958 labor force figures by 20-year age groups were known, the labor force estimates obtained by C. were adjusted (pro-rated) to these known totals.

There were thus two major adjustments made. One dealt with adjustments to arrive at a distribution of population in 1958 by sex and age and the other involved adjustments of available 1958 data to arrive at 1958 participation rates by 5-year age groups.

Since we are using data classified by 5-year age cohorts, it is convenient to transform our time-reference period to a central 5-year period. Using data on population and labor force classified by sex and 5-year age groups for 1958 (as computed in the procedure described above) and for 1968, we use linear

¹ It should be noted here that data on the population ten years old and over the labor force are available in 1958 in total (both sexes, male, female) and by 20-year age groups within these totals.

² Computations from C and one are done on males and females only. Figures for "Both Sexes" are to be taken as the sum of the figures for "Male" and "Female".

interpolation to derive the figures for this selected central quinquennium (1960.5-1965.5). This procedure could very well involve errors but will probably suffice for our purposes. In this regard, Durand and Holden say:

Of course, the trends of population and labor force during an intercensal period are not ordinarily linear and so the estimates for beginning and ending dates of the central quinquennium, obtained by linear interpolation, will not be exact. This consideration, however, is irrelevant to the purpose, which is not to estimate actual changes during the central quinquennium but rather to obtain measures having a five-year time-reference which will be representative of the experience during the intercensal interval.¹

Taking into account the fact that the different components of change do influence one another, average numbers of the cohort were used instead of numbers at either the beginning date or the end date of the central quinquennium. For instance, the rates in use (e.g. mortality rate, rate of entry, rate of retirement) were applied to the average numbers of the age cohort during the mid-five-year reference period. Also, the mortality rate used here was calculated keeping this problem in mind. Hence, M_x is defined as the ratio of deaths to the average number of the cohort during the period.² Or,

$$M_x = \frac{\frac{L}{5x} - \frac{L}{5x} + 5}{\frac{1}{2} \left[\frac{L}{5x} + \frac{L}{5x} + 5 \right]}$$

In spite of these corrections, there are still obviously quite a number of errors built into the analysis stemming from the characteristics and nature of the data used. Furthermore, the general applicability of the conclusions derived from this kind of analysis is highly dependent upon how valid the assumptions are. There are a few assumptions made such as: 1) the applicability of the sex-age specific mortality rates of the entire population to both persons in the labor force and persons outside the labor force; 2) the applicability of labor force participation rates in the whole population to both migrants

¹ Durand and Holden, *Methods of Analysing Components of Change*, pp. 5-6.

² *Ibid.*, pp. 7-8

and non-migrants; and 3) the negligibility of the number of retirements at ages of net entry into the labor force and the number of entries at ages of net retirement from the labor force.

The Results

Before proceeding, we shall first examine labor force participation rates in 1958 and 1968. The rates in 1958 will be those computed in this paper and those in 1968 will be those obtained from preliminary tables of NDS data. It should be pointed out that observations made here will be tentative in view of the manner in which the rates in 1958 were obtained. The comparison is nevertheless being undertaken to obtain some suggestion as to how participation rates by five-year age groups were changing during some time interval.

In general, there was a slight decrease in the overall participation rate from 1958 to 1968 (Table 1). Whereas the overall male participation rate decreased during the decade, that of females increased. Of interest is the decrease in the participation rates of young persons (ages 10-24). This holds true for both males and females, but is more so for males. Participation rates by five-year age groups from ages 25-44 increased during the decade and this is again true for both males and females. The patterns manifested by ages 45-64 are, in general, more irregular. Thus, while the rates for both sexes suggest a decline in the rates at ages 45-49 and 50-54 and an increase at ages 55-59 and 60-64, the patterns by sex present no definite direction. This is especially the case for males. The rates for females increase at all age groups from 45-64 except at ages 50-54. Looking at the general patterns we can especially take note of the following:

1. The decrease in participation rates between ages 10-24, especially true for males;
2. The increase in participation rates between ages 25-44, especially notable among females;
3. A more unpredictable and irregular pattern at ages 45-64, more true for males than females; and
4. A slight overall increase in the participation rates of old persons (65 and over), caused by the increased in male rates.

Female participation rates increased at all ages except at the younger ages of 10-24 and age groups 50-54 and 65 and over. Male participation rates decreased at the younger ages and at age groups 45-49, 50-54, and 60-64 and increased at the

central ages of 25-44 and at the oldest age group of 65 and over. This presents quite a contrast to the trends in the United States, where because of relatively more extensive Social Security programs and pension plans, aging men are more able to withdraw from the labor force. The increasing rates of participation of women, however, is a phenomenon that has been observed in both countries and suggests a concomitant of changes that have been taking place in the occupational structure of the Philippines, namely, the increase in the number of white-collar jobs, positions that can be easily filled by women.

Table 1. — Labor Force Participation Rates by Age & Sex, Philippines: May 1958 and May 1968.

Age Group

	1958			1968		
	BS	M	F	BS	M	F
Total	61.20	80.46	42.87	60.55	77.13	44.09
10-14	30.14	37.85	22.45	28.12	35.37	20.16
15-19	64.18	78.25	50.99	61.62	72.84	50.21
20-24	68.91	90.66	57.04	69.76	87.80	52.83
25-29	69.42	97.20	44.83	71.84	97.68	49.89
30-34	69.42	97.20	44.83	73.35	98.50	50.82
35-39	72.17	96.69	49.48	76.57	98.69	55.33
40-44	72.17	96.69	49.48	75.32	98.82	51.49
45-49	76.25	98.07	53.68	75.41	97.86	54.60
50-54	76.25	98.07	53.68	73.72	95.86	51.52
55-59	63.39	87.65	38.86	74.20	94.74	52.21
60-64	63.39	87.65	38.86	64.07	87.34	41.31
65 & over	38.00	56.30	19.20	39.13	58.66	16.02

Sources: 1958 participation rates as computed in this paper.
1968 rates computed from tables set-up using National Demographic Survey data.

The results of the computations with regard to components of change are presented in Tables 2 and 3 and summarized in Table 4.

Examining Table 2, we can note an increase in the male labor force during the central quinquennium. The patterns by age indicate positive changes only at three age groups — 10-14, 30-34, and 40-44. All other age groups register negative changes. Increments to the labor force at the younger ages

¹ Bancroft, *The American Labor Force*, pp. 29-31.

Table 2.—Estimation of components of change in size of the labor force:
Philippines, males, central quinquennium of the interval 1958-1968.

COMPONENTS OF CHANGE

51

Age of cohorts	Population					Labor Force			
	1960.5 (1)	1965.5 (2)	1960.5 (1)	1965.5 (2)	Change (3)	Average (4)	1960.5 (5)	1965.5 (6)	Change (7) (6) - (5)
10-14	15-19	1693	1682	— 11	1688	635	1246	611	940
15-19	20-24	1328	1138	—190	1233	1027	1010	— 17	1018
20-24	25-29	1040	910	—130	975	948	888	— 60	918
25-29	30-34	839	820	— 19	830	817	806	— 11	812
30-34	35-39	704	788	84	746	687	775	88	731
35-39	40-44	658	647	— 11	652	640	637	— 3	638
40-44	45-49	523	553	30	538	510	542	32	526
45-49	50-54	499	438	— 61	468	489	421	— 68	455
50-54	55-59	364	376	12	370	355	352	— 3	354
55-59	60-64	277	258	— 19	268	250	226	— 24	238
Total		7925	7610	—315	7768	6358	6903	545	6630

Age of cohorts	Activity Rates					Components of population change			
	1960.5	1965.5	1960.5 (9) (5)/(1)	1965.5 (10) (6)/(2)	Change (11) (10)-(9)	Average (12)	Mort. Rate (13)	Mortality (14) (13)x(4)	Migration (15) (2)-(14)
10-14	15-19	37.51	74.08	36.57	55.80	.01020	— 17.22	6.22	
15-19	20-24	77.33	88.75	11.42	83.04	.01461	— 18.01	—171.99	
20-24	25-29	91.15	97.58	6.43	94.36	.01972	— 19.23	—110.77	
25-29	30-34	97.38	98.29	0.91	97.84	.02360	— 19.59	.59	
30-34	35-39	97.59	98.35	0.76	97.97	.02805	— 20.93	104.93	
35-39	40-44	97.26	98.45	1.19	97.86	.03483	— 22.71	11.71	
40-44	45-49	97.51	98.01	0.50	97.76	.04384	— 23.59	53.59	
45-49	50-54	98.00	96.12	— 1.88	97.06	.05717	— 26.76	— 34.24	
50-54	55-59	97.53	93.62	— 3.91	95.58	.08027	— 29.70	41.70	
55-59	60-64	90.25	87.60	— 2.65	88.92	.10527	— 28.21	9.21	
Total		80.23	90.71	10.48	85.47		—225.95	— 89.05	

Age of cohorts		Components of labor force change				Cl. Net entry at constant rate	
1960.5	1965.5	A. Mortality (16) (14) x (12)	B. Migration (17) (15) x (12)	C. Net entry (18) (11) x (4)	D. Net retirement (19)	Rate (20)	No. (21) (20) x (4)
10-14	15-19	— 9.61	3.47	617		77.33	1305
15-19	20-24	— 14.98	—142.82	143		13.82	170
20-24	25-29	— 18.15	—104.52	63		6.23	61
25-29	30-34	— 19.17	.58	8		.21	2
30-34	35-39	— 20.51	102.80	6		.33	2
35-39	40-44	— 22.22	11.46	8		.25	2
40-44	45-49	— 23.06	52.39	3		.49	3
45-49	50-54	— 25.97	— 33.23		— 9		
50-54	55-59	— 28.39	39.86		—14		
55-59	60-64	— 25.08	8.19		— 7		
Total		—207.12	— 61.82	846	—30		1541

Age of cohorts		D1. Net retirement at constant rate		C2+D2. Effect of the changing entry and retirement rates		Natural increase	
1960.5	1965.5	Rate (22)	Number (23) (22) x (4)	(18)—(21) or (19)—(23) (24)		(16)+ (21) or (23) (25)	
10-14	15-19				—688		1295
15-19	20-24				— 29		155
20-24	25-29				2		43
25-29	30-34				6	—	17
30-34	35-39				4	—	22
35-39	40-44				6	—	20
40-44	45-49				0	—	20
45-49	50-54	— .47	— 2		— 7	—	28
50-54	55-59	—7.28	—27		13	—	55
55-59	60-64	2.69	— 7		0	—	32
Total			—36		—693		1299

Table 3.—Estimation of components of change in size of the labor force:
Philippines, females, central quinquennium of the interval 1958-1968.

Age of Cohorts		Population				Labor Force			
1960.5	1965.5	1960.5	1965.5	Change	Average	1960.5	1965.5	Change	Average
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
								(6)—(5)	
10-14	15-19	1623	1680	57	1652	344	840	496	592
15-19	20-24	1383	1221	-162	1302	685	651	-34	668
20-24	25-29	1134	1062	-72	1098	618	518	-100	568
25-29	30-34	958	915	-43	936	444	454	10	449
30-34	35-39	783	831	48	807	366	450	84	408
35-39	40-44	715	649	-66	682	368	332	-36	350
40-44	45-49	550	588	38	569	275	320	45	298
45-49	50-54	512	435	-77	474	274	226	-48	250
50-54	55-59	380	353	-27	356	190	177	-13	184
55-59	60-64	264	257	-7	260	116	105	-11	110
Total		8282	7991	171	8136	3680	4073	393	3877

Age of cohorts		Activity Rates				Components of population change			
1960.5	1965.5	1960.5	1965.5	Change	Average	Mort. Rate	Mortality	Migration	
		(9)	(10)	(11)	(12)	(13)	(14)	(15)	
		(5)/(1)	(6)/(2)	(10)-(9)			(13)x(4)	(3)-(14)	
10-14	15-19	21.20	50.00	28.80	35.60	.00722	- 11.93	68.93	
15-19	20-24	49.53	53.32	3.79	51.43	.01029	- 13.40	-148.80	
20-24	25-29	54.50	48.78	- 5.72	51.64	.01494	- 16.40	- 55.60	
25-29	30-34	46.35	49.62	3.27	47.99	.02074	- 19.41	- 23.59	
30-34	35-39	46.74	54.15	7.41	50.45	.02711	- 21.88	69.88	
35-39	40-44	51.47	51.16	- 0.31	51.32	.03185	- 21.72	- 44.28	
40-44	45-49	50.00	54.42	4.42	52.21	.03743	- 21.30	59.30	
45-49	50-54	53.52	51.95	- 1.57	52.74	.04771	- 22.61	- 64.39	
50-54	55-59	52.78	50.14	- 2.64	51.46	.06887	- 24.52	17.52	
55-59	60-64	43.94	40.86	- 3.08	42.40	.09575	- 24.90	17.90	
Total		44.43	50.97	6.54	47.70		-198.07	- 92.93	

Age of cohorts		Components of labor force change				C1. Net entry at constant rate	
1960.5	1965.5	A. Mortality (16) (14) x (12)	B. Migration (17) (15) x (12)	C. Net entry (18) (11) x (4)	D. Net retirement (19)	Rate (20)	No. (21) (20) x (4)
10-14	15-19	- 4.25	24.54	476		49.53	818
15-19	20-24	- 6.89	-76.42	49		4.97	65
20-24	25-29	- 8.47	-28.71		-63		
25-29	30-34	- 9.31	-11.32	31		.39	4
30-34	35-39	-11.04	35.25	60		4.73	38
35-39	40-44	-11.15	-22.72		- 2		
40-44	45-49	-11.12	30.96	25		3.52	20
45-49	50-54	-11.92	-28.69		- 7		
50-54	55-59	-12.62	9.01		- 9		
55-59	60-64	-10.56	7.59		- 8		
Total		-97.33	-60.51	641	-89		945

Age of cohorts		D1. Net retirement at constant rate		C2+D2. Effect of the changing entry and retirement rates		Natural increase	
1960.5	1965.5	Rate (22)	Number (23) (22) x (4)	(18)-(21) or (19)-(23)		(16)+(21) or (23)	
10-14	15-19				-342		814
15-19	20-24				- 16		58
20-24	25-29	-8.15	- 89		26	-	97
25-29	30-34				27	-	5
30-34	35-39				22	-	27
35-39	40-44	-1.47	- 10		8	-	21
40-44	45-49				5	-	9
45-49	50-54	-0.74	- 4		- 3	-	16
50-54	55-59	-8.84	- 31		22	-	44
55-59	60-64	-4.42	- 11		3	-	22
Total			-145		-248		703

are accounted for by entries and decrements at the central ages due to emigration while decrements at the older ages are due to either deaths or retirements. There was also an increase in male participation rate at all ages except at ages 45 years and over. Among the two components of change in the population 10 years old and over (mortality and migration), we can note out-movements at the ages 15-19, 20-24, and 45-49.

Table 4. — Estimated components of change in the labor force by sex: Philippines, central quinquennium of the interval 1958 - 1968

Components	Quinquennial Changes			Annual per cent rates of change		
	BS ¹	M	F	BS	M	F
1) Net change	942	547	395	1.79	1.65	2.04
2) A. Mortality	-304	-207	-97	-.58	-.62	-.50
3) B. Migration	-122	-62	-60	-.23	.19	.31
4) C. Net entries in cohorts of net entry	1487	846	641	2.83	2.55	3.31
5) D. Net retirements in cohorts of net entries and retirements at constant age-specific rates:	-119	-30	-89	-.23	-.09	-.46
6) C ₁ Net entries	2486	1541	945	4.73	4.65	4.87
7) D ₁ Net retirements	-181	-36	-145	-.34	-.11	-.75
8) Effects of changing entry and retirement rates (C ₁ & D ₁)	-941	-693	-248	-1.79	-2.09	-1.28
9) Natural increase (A + C ₁ + D ₁)	2002	1299	703	3.81	3.92	3.63

¹ Calculations carried out for male & female separately. Figures for BS = M + F.

Among the components of change in the size of the labor force, the large numbers of entries assures a positive net change in the male labor force. Emigration occurs at the age groups 15-19, 20-24 and 45-49. Entries occur up to ages 40-44, with the number of entries decreasing as age increases. Decrements start at age 45 and go on to ages 60-64. Natural increase in the male labor force stands at nearly 1.3 million during the central quinquennium.

Among females, we can likewise note a positive change in the labor force. An overall increase in activity rates also occurs, with negative changes being manifest at ages 45 and over (like males) and at age groups 20-24 and 35-39. The larger decline in activity rate at ages 20-24 has been previously observed to be caused by female labor force retirements at ages of marriage.

Among the components of change in the population of working age (columns 14 and 15), the decrement among females due to mortality is less than that for male while the decrement due to migration is slightly higher. Emigration is evident at ages 15-29, 35-39 and 45-49.

The observation of a slightly higher migration figure for the female population ten years old and over (93,000 against 89,000 for males) is supported by United States immigration statistics. Data indicate that female immigration to the United States has been consistently higher than male immigration from 1959 to 1968. Immigration of both males and females is especially considerable at the ages between 20-39. Although the computed total number of immigrants of working age is larger than the total number in published data on Philippine immigrants to the United States from 1958 to 1968, we should consider the fact that the latter figure excludes persons who move to countries other than the United States and that it includes only those Filipinos who officially enter the United States as immigrants but not those persons who enter as non-immigrants (tourists, temporary workers and trainees, transit aliens) who convert their status to permanent residents at some later time.

In the female labor force, the smaller influence of the mortality component shows up once more, decrements due to mortality being less than one-half of decrements due to mortality in the male labor force. The number for migration is almost as large as that for males, with decrements occurring in the same age-groups as those for which emigration in the female population of working age was observed (15-29, 35-39, and 45-49). Entries occur up to ages 40-44, with retirements interspersed at ages 20-24 and 35-39. This pattern has been observed before and is attributable to the fact that ages of entry and ages of retirement for women have quite a degree of overlap. Total number of entries is less than that for males but the number of retirements was greater. This observation also holds when we consider net entries (C.) and net retirements (D.) at constant rates (columns 21 and 23 of each table, res-

pectively). Natural increase is considerably less than that for males.

A summary of results is given in Table 4. A positive net change in the size of the total labor force is registered during the central quinquennium. Net entries into the labor force were sufficiently substantial to offset any decrements due to mortality, out-migration, and net retirements. This is the case even when we consider the changes by each sex. Looking at the annual per cent rates of change in each of the components, we can note that all the female rates are higher than the male rates except in one component: mortality. Thus, while positive net changes occur in both the male labor force and the female labor force, the annual rate of change for females was higher than that for males.

The second half of Table 4 indicates the changes during the quinquennium attributable to: 1) unchanging age-specific rates of entry and retirement (C_i and D_i) and 2) changes in age-specific rates of entry and retirement (C_i and D_i). Natural increase in the total labor force is represented by the algebraic sum of components A, C, and D. The annual rates of change of both component C (net entries) and D (net retirements) are higher for females than for males. The reverse is true when we consider components C_i and D_i. Natural increase also proceeded at a faster rate per annum for males than for females.

The results have shown that increase in the total labor force would have even been larger if the components of mortality, retirements, and migration had not "tempered" it down. The main point to consider here is whether the economy can generate a sufficient number of jobs every year to absorb yearly increases, mainly in the form of new entrants. Inability to accommodate these annual additions to the labor force can result in serious problems of unemployment. One outlet for annual entrants is emigration, which has gained significance in the last five years or so. While emigration could be a "safety valve", we should not lose sight of the fact that the country may be losing needed manpower in the process. Hence, while certain skills are in shortage in the country, we may find people with precisely these skills moving out of the country to find jobs elsewhere. The problem is not confined to the provision of an adequate number of jobs annually. A necessary implication is also the creation and maintenance of attractive and satisfactory terms of employment. Although this includes a wide variety of factors (like environment, employer-employee relations, etc.), it seems that in a developing country like the Philippines, a fundamental item to consider is the establishment of salary

scales commensurate not only with the qualifications and experience but also with the expectations of workers.

The tentative character of observations made in this paper is reiterated here. Another constraint imposed upon us may also be mentioned, namely, the unavailability of data in finer breakdowns. For instance, access to population and labor force data according to an urban-rural classification by sex would have given us a clearer picture of the processes involved and would also have accounted for rural-urban movements.