

THE EFFECT OF AGE AT MARRIAGE ON THE FERTILITY OF EVER-MARRIED WOMEN IN THE ILOCOS, CENTRAL LUZON AND BICOL REGIONS, 1960*

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The Philippines, like all other nations, is committed to achieving a higher level of living for her people — adequate food, good health, high standard of education and gainful employment. The current rate of population growth, which shows a yearly increase of 3.06 per cent as of the last intercensus period (1948-1960), remains an obstacle to the attainment of these goals. This rate of increase, which ranks among the highest in the world, is due to the rapid decline of mortality while fertility remains high. If maintained, the population of the Philippines will be doubled that of the 1960 count (about 27 million) in 23 years.

Population increase or decrease depends on the action of three forces — fertility, mortality and migration. These are the three constituents of population change within a country. Fertility plays a major role in determining the age structure of the population, with mortality and migration exerting relatively little influence. A high birth rate produces a population that contains a large proportion of young people while a low birth rate brings an aging population. The disadvantage of a high birth rate and consequently a young population, as Coale succinctly puts it, is that:

“Because of extremely young age distribution, adults in the impoverished underdeveloped countries must support a disproport-

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tionately large dependent child population — twice as great a burden of dependency per adult in the working ages of 15-65 as in typical industrialized countries — a burden these poor countries can scarcely afford. The enormous proportion of children makes it extraordinarily difficult, where incomes are extremely low, to provide adequate shelter, nourishment, and education for the young.”¹

The study of fertility differentials in the Philippines is of significance in the planning of economic development of the country. Economic development requires greater investments in agriculture, industry, public health and education. Greater savings are required to meet these increased investments. A high birth rate reduces savings by increasing the burden of mere subsistence in relation to income, by enlarging the burden of education and other public services, by increasing pressures on already densely populated areas, and by undermining health due to overcrowding and consequently reducing productivity.

This article is part of a study based on an analysis of the fertility performances of ever-married women (women who have been married, widowed, divorced or separated) in the regions of Ilocos and Mountain Province (Region II), Central Luzon (Region IV) and Bicol (Region VI) with respect to three selected factors, namely: age at marriage, education and religion of the woman.

The following provinces make up Region II: Abra, Ilocos Norte, Ilocos Sur, La Union and Mountain Province. Bataan, Bulacan, Nueva Ecija, Pampanga, Pangasinan, Tarlac and Zambales comprise Region IV. Region VI is composed of Albay, Camarines Norte, Camarines Sur, Catanduanes, Masbate and Sorsogon. The findings in these three regions are compared with the Philippines as a whole to show regional differences

¹ Ansley J. Coale, "How Populations Get Older or Younger", *The Voice of America Forum Lectures*. United States of America: Doubleday & Co., Inc., 1964, pp. 5 & 6.

in fertility patterns and trends. This paper will concentrate only on one of the factors, age at marriage, as it relates to the fertility of the ever-married women in the aforementioned three regions.

This study, being on a sample basis, will be subject to some chance or random fluctuations. These errors due to sampling must always be kept in mind in examining the results. Our findings can eventually be reviewed when complete tabulations of the 1960 census data on fertility become available.

Source of the Data

On the fifteenth of February, 1960, a census of population was conducted by the Bureau of the Census and Statistics as part of the World Program of Censuses sponsored by the United Nations. The census schedule consisted of two parts: Part I, which was asked of all households, and Part II containing items on fertility and labor force activity which applied only to a 10 per cent sample of households.

A 0.5 per cent sample of the 1960 Population Census of the Philippines made available by the Bureau of the Census and Statistics to the Statistical Center of the University of the Philippines was the main source of information utilized in this analysis. The 10 per cent of households from which information on both parts I and II of the Population schedule was collected formed the sample frame. Sampling was made within each province (55 provinces at this time) in two stages—enumeration districts (E.D.'s) being first stage and households being second stage. The enumeration districts in chartered cities formed stratum I; enumeration districts in provincial capitals and poblaciones formed stratum II and all the other enumeration districts (for barrios) com-stratum III. Within each stratum, the enumeration districts were divided into 3 sub-strata according to the number of

households: (a) 10 to 50, (b) 51 to 150, and (c) 151 and over. Five per cent of the E.D.'s in each stratum (I, II, III) were selected systematically with a random start. The punched cards for all these selected households (1 in 200 households) formed the ultimate sample of cards.

Age at Marriage

Contraceptive practices among Filipinos are almost nil or comparatively ineffective, especially at early ages. So, whatever differences there are in age at childbearing may be attributed principally to differences in age at marriage.

According to Coale and Tye, the two essential reasons why a younger pattern of fertility (women marrying at younger ages) produces faster growth are: (a) younger childbearing permits some births to occur that otherwise would be prevented by mortality, and (b) the rate of increase per generation is compressed into a shorter period causing a higher annual rate of growth. Thus, younger childbearing due to early marriage means childbearing by a larger proportion of the female population and a higher annual rate of increase.²

Median Age At Marriage

The median age at marriage was computed to ascertain the ages during which women in the selected regions generally shift from the single to the married state. The median ages at marriage for different marriage durations are found in table 1.

² Ansley J. Coale and C.Y. Tye, "The Significance of Age Patterns of Fertility in High Fertility Populations", *Milbank Memorial Fund Quarterly*, Vol. XXXIX, No. 4 (October, 1961), p. 636.

TABLE 1

MEDIAN AGE AT MARRIAGE OF WOMEN IN THREE
SELECTED REGIONS AND THE PHILIPPINES: 1960

Duration of marriage (Years)	R e g i o n			Philippines
	Ilocos	Central Luzon	Bicol	
Under 5	22.0	21.0	20.2	20.9
5 — 9	19.7	19.6	19.0	19.4
10 — 14	20.4	19.4	18.6	19.3
15 — 19	19.9	19.9	18.4	19.4
20 — 24	20.6	19.4	18.7	19.1
25 & over	21.0	19.5	18.6	19.2

Except for the less-than-5 years duration of marriage, there appears to be a fairly constant median age at marriage in each region—about 20.3 years for Ilocos, 19.5 years for Central Luzon, 18.7 years for Bicol and 19.3 for the Philippines. It is only with the less-than-5 years marriage duration, that the median ages at marriage shoot abruptly by about two years to 22.0 years for Ilocos and 21.0 for Central Luzon and by nearly one year to 20.0 for Bicol. The median ages at marriage for Ilocos are consistently higher than Central Luzon or Bicol. Bicol has the lowest average age at marriage.

If the apparent increase in the average age of recent marriages is even partially indicative of a real change in this respect, this is a highly significant finding.

Cumulative Percentages of Children Ever Born by Age at Marriage

Table 2 compares all fertile mothers (women with five or more children) of completed fertility (45 years and over) with the very fertile mothers (women with 10 or more children).

For the Philippines as a whole the children of women with 5 or more children comprise 88 per cent of all children born to women aged 45 and over, 93 per cent of the births to those who got married when they were under 20, but only 83 per cent to those married at later ages. The corresponding values for the several regions are shown in Table 2. In spite of important differences in levels of fertility among the regions the differentials by age at marriage are quite similar.

TABLE 2

CUMULATIVE PERCENTAGES OF CHILDREN EVER BORN BY AGE AT MARRIAGE FOR WOMEN EVER-MARRIED, 45 YEARS & OVER: SELECTED REGIONS AND THE PHILIPPINES, 1960

Region	For Women 45+ with 5 or More Children			For Women 45+ with 10 or More Children		
	Age at Marriage			Age at Marriage		
	Total	Under 20	Over 20	Total	Under 20	Over 20
Ilocos	80.1	87.6	76.4	23.9	35.9	17.9
Central Luzon	89.6	93.7	86.0	36.5	50.1	24.8
Bicol	90.5	95.1	84.5	41.9	53.6	26.4
Philippines	87.9	93.1	83.2	33.0	45.2	22.0

Tables 3-A and 3-B show the mean number of children per woman and also per mother, 45 years old and over, by age at marriage. The mean number of children ever born per woman ever married is the ratio of the number of children to the number of women in a specified age group. Taking the ratio of the number of children to the number of mothers yields the average number of children per mother.

Upon relating the mean number of children per ever married woman, 45 years and over, in each of the regions in Table 3-A with their respective median age at marriage, we

observe that Ilocos, with the highest median age at marriage, has the lowest fertility. The lowest median age found in Bicol is associated with the highest mean number of children. The negative relationship between fertility and age at marriage may be seen upon examination of the average number of children ever born per woman ever married and also per mother. In all instances, the mean number of children per woman is greater for those married under 20 years than those married at 20 years and over. The usual pattern of highest fertility in the Bicol Region, lowest in Ilocos and Mountain Province, with the fertility of Central Luzon coming close to that of the Philippines may be observed in both tables.

Expressing the differences between the mean number of children for those married under 20 years and for those married over 20 years as a per cent to the total shows that the mean number of children for those married quite early exceeds the average number of children for those who delayed their marriage to a later date by 36 per cent for Ilocos, 35 per cent for Bicol and 32 per cent for Central Luzon.

For mothers of completed fertility, the increase in the mean number of children for women married under 20 years is quite high in Bicol (32 per cent more than that for woman married over 20 years) as compared to the two other regions. For Ilocos and Central Luzon, the average number of children for women married under 20 years is 26 and 27 per cent more than those for women who married later.

TABLE 3-A

MEAN NUMBER OF CHILDREN EVER BORN PER WOMAN
EVER-MARRIED, 45 YEARS AND OVER BY AGE AT
MARRIAGE: SELECTED REGIONS AND THE
PHILIPPINES, 1960

Region	Children Ever Born Per Woman Ever Married, 45+			Difference B-C	Difference as per cent to Total B-C A
	Age at Marriage				
	Total (A)	Under 20 (B)	Over 20 (C)		
Ilocos	5.15	6.50	4.66	1.84	36
Central Luzon	6.54	7.83	5.73	2.10	32
Bicol	6.72	7.92	5.60	2.32	35
Philippines	6.20	7.43	5.39	2.04	33

TABLE 3-B

MEAN NUMBER OF CHILDREN EVER BORN PER MOTHER
45 YEARS AND OVER BY AGE AT MARRIAGE

Region	Children Ever Born Per Mother 45+			Difference B-C	Difference as per cent to Total B-C A
	Age at Marriage				
	Total (A)	Under 20 (B)	Over 20 (C)		
Ilocos	5.52	6.56	5.11	1.45	26
Central Luzon	6.82	7.94	6.08	1.86	27
Bicol	7.08	8.22	5.98	2.24	32
Philippines	6.50	7.59	5.75	1.84	28

Average Number of Children Ever Born Per Woman Ever Married of Completed Fertility By Age At Marriage & Present Age

Upon examining the mean number of children born per woman according to the ages at marriage of the women ever married of completed fertility in 5-year age groups, we find that the higher average number of children occurs to the women who were married in their teens. It is a well-known fact that the number of children ever born declines as the age at marriage increases since women married at an earlier age are, by and large, available for reproduction for a longer span of their reproductive period and prior to the onset of various impairments to fecundity.

Graphs (Figures I-A and I-B) based on the average number of children ever born per woman ever-married by age at marriage and present age, bring out the point that the highest mean number of children ever born per woman were found among the Bicol women. The women in Ilocos were reported to have the lowest average number of children. The midway averages of Central Luzon are like those of the Philippines.

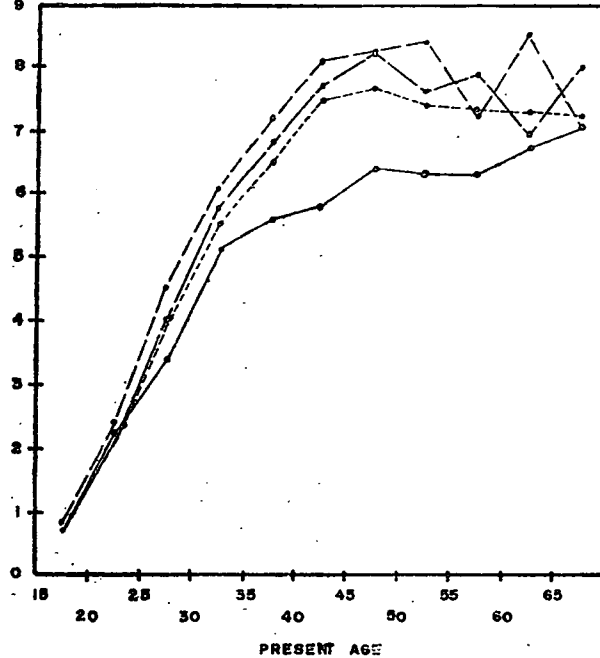
A distinctive feature found among Ilocano women of incomplete fertility who were married under 20 years is that for the last 15 years of their reproductive period, the average number of children was apparently kept at an almost constant level of 5.5 children per woman. The relative stability of the mean number of children for those women aged 30-44, if valid, might perhaps be credited to the migratory habits of their husbands. It is, however, possible that this phenomenon reflects gross under-reporting of children ever born by all except very young wives in all or part of this region.

FIGURE I-A

AVERAGE NUMBER OF CHILDREN EVER BORN PER WOMAN EVER MARRIED BY AGE AT MARRIAGE AND PRESENT AGE

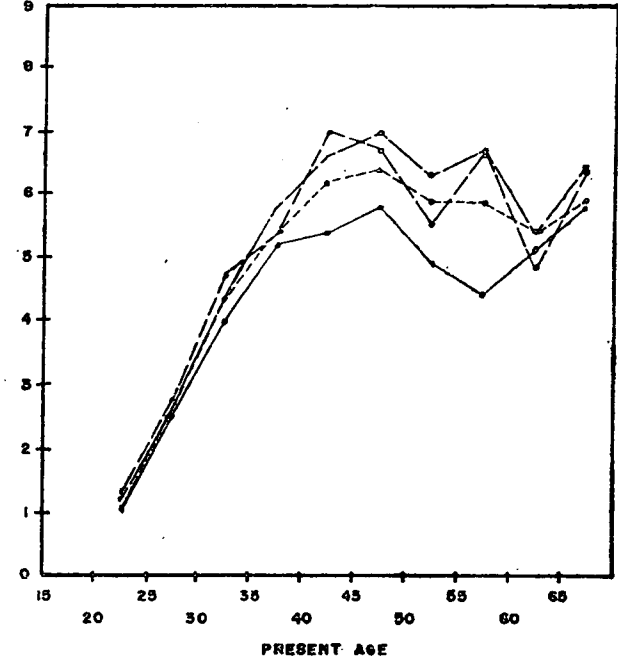
AVERAGE NO. OF CHILDREN PER WOMAN

AGE AT MARRIAGE: BELOW 20



AVERAGE NO. OF CHILDREN PER WOMAN

AGE AT MARRIAGE: 20-24



LEGEND:

—— ILOCOS AND MT. PROVINCE

----- CENTRAL LUZON

..... BIGOL

----- PHILIPPINES

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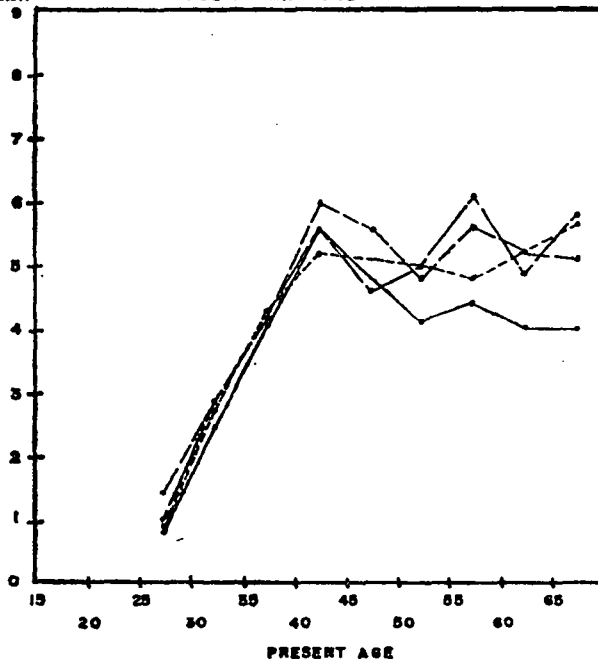
FIGURE I-B

AVERAGE NUMBER OF CHILDREN EVER BORN PER WOMAN EVER MARRIED BY AGE AT MARRIAGE AND PRESENT AGE

275

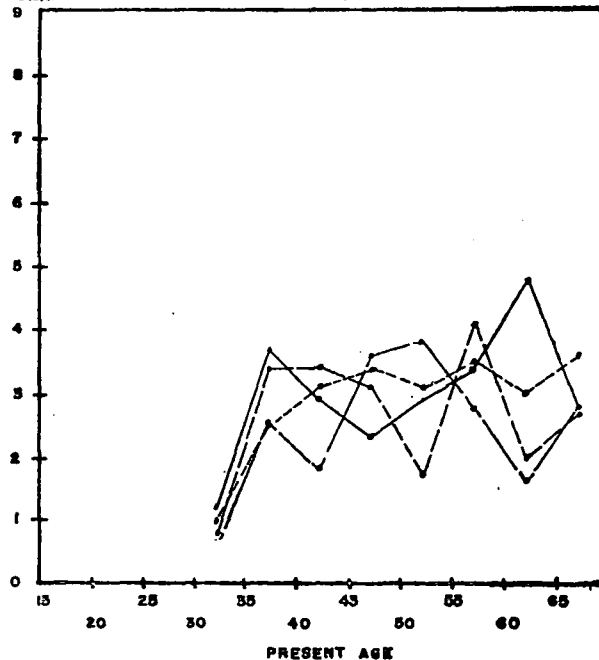
AVERAGE NO. OF CHILDREN PER WOMAN

AGE AT MARRIAGE: 25-29



AVERAGE NO. OF CHILDREN PER WOMAN

AGE AT MARRIAGE: 30 AND OVER



LEGEND:

———— ILOCOS AND MT. PROVINCE

———— CENTRAL LUZON

———— BICOL

———— PHILIPPINES

Percentages of Women 45 Years and Over with Specified Number of Children by Age At Marriage

The diagrams showing the percentages of women ever married with specified numbers of children ever born for women of completed fertility (Figures 2-A, 2-B and 2-C) depict clearly the inverse relationship between fertility and age at marriage. As the age at marriage progresses, there are marked decreases in the percentages of 7 or more children ever born for all regions and for the total Philippines. With the reduction in the size of the family as the age at marriage of the woman increases, there is a concomitant gain in the proportions of women having 0 child and 1-3 children. The percentages for women ever-married with 4-6 children increase, but rather slightly.

In all three 10 year age groups, we find that there is a persistent trend among the Ilocano women to produce less children than the Bicolano women. The fertility of women in Central Luzon are midway between that of the two regions. Comparing the percentages of 7 or more children in Ilocos and Bicol for the different ages at marriage shows that Bicol women are more fertile. The higher median age at marriage, the lower sex ratios and the lower proportions of married and ever-married women may help explain the lower fertility level in Ilocos, while the opposite may account for the high level of fertility in Bicol.

It can be observed that diagrams for the three 10-year age classes of women for the whole Philippines are very similar. The differences in this respect among the selected regions must be due in large part to random fluctuations.

Conclusion

A clear indication of the inverse relationship between age at marriage and fertility may be gleaned from a comparison of the median age at marriage in the three regions with the

FIGURE 2-A

PERCENT DISTRIBUTION BY NUMBER OF CHILDREN EVER BORN FOR EVER MARRIED WOMEN 45-54 YEARS, BY AGE AT MARRIAGE

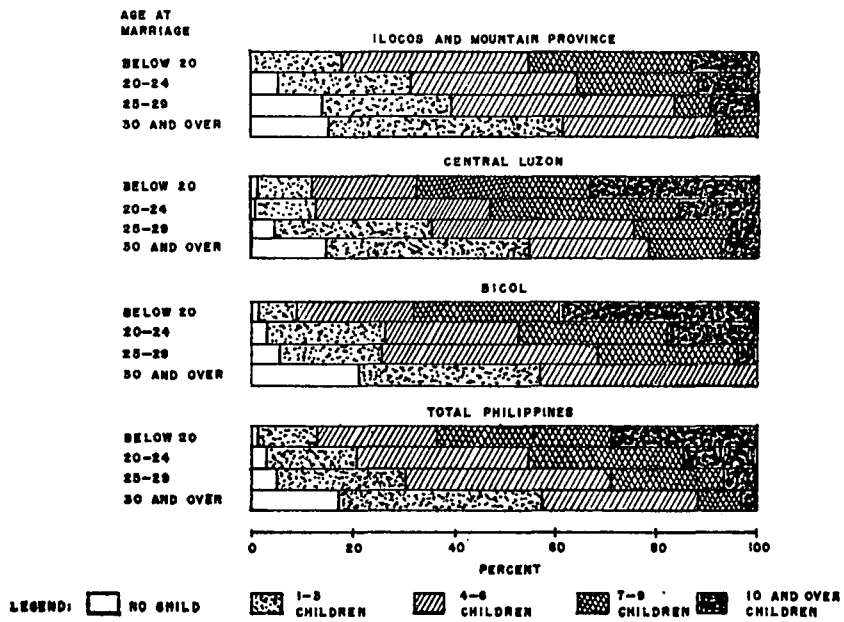


FIGURE 2-C

PERCENT DISTRIBUTION BY NUMBER OF CHILDREN EVER BORN FOR EVER MARRIED WOMEN 65 YEARS AND OVER, BY AGE AT MARRIAGE

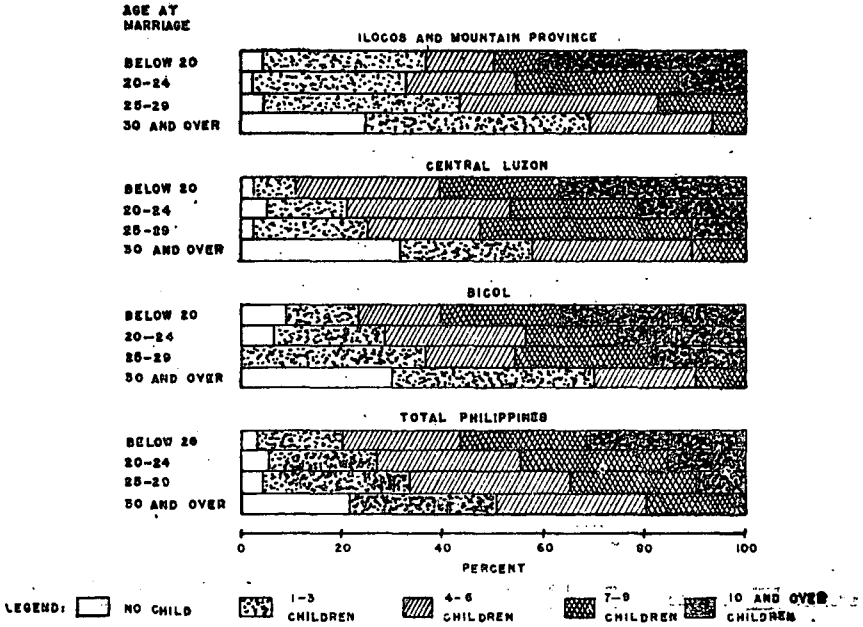
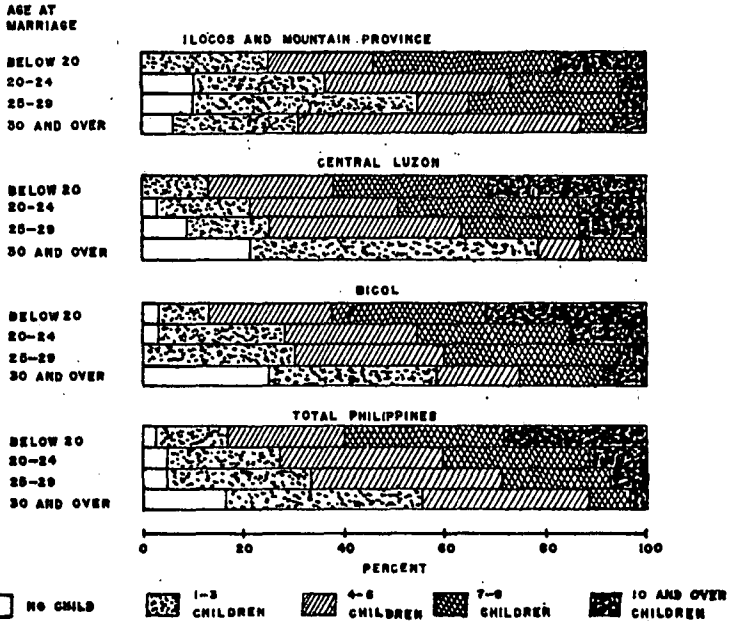


FIGURE 2-B

PERCENT DISTRIBUTION BY NUMBER OF CHILDREN EVER BORN FOR EVER MARRIED WOMEN 55-64 YEARS, BY AGE AT MARRIAGE



mean number of children per woman, 45 years old and over. The median ages at marriage suddenly rose from 20.3 years to 22.0 years in Ilocos, 19.5 to 21.0 in Central Luzon and 18.7 to 20.0 in Bicol when comparing the median ages at marriage for 5 and more years of marriage duration with those for less-than-5 years duration.

If the increase of two years in the ages at marriage of women recently married (less-than-5-years) in Ilocos and Central Luzon and the one year increase in Bicol are not chance effects, this is a significant finding. It was seen that lowest fertility was associated with the highest median age at marriage found in Ilocos. In contrast, highest fertility among the regions was observed in Bicol which had the lowest median age at marriage.

The depleting effect of marriage at ages beyond 20 years was clearly seen in the comparison of the 5 and more children borne by women married under and over 20. On the average, there was a lowering of about 10 per cent of the 5 or more children borne by women who married later in the three regions as well as the total Philippines. With regards to 10 or more children about 23 per cent was lost by women marrying later than 20 years.

If ever we hope to succeed in lowering our birth rates, we must first be fully aware of the need for such a step. There is no doubt that the Philippines is numbered as one of the underdeveloped countries because she has these in common with them: low per capita income, a low rate of savings and investment, high proportion of the labor force engaged in agriculture, low industrial output, poor roads and communication, a high percentage of dependent children and very high birth rates. If birth rates were reduced, all the other conditions mentioned above could be more easily improved, and this would speed up economic development and raise standards of living in our country.

When fertility is uncontrolled, deferring marriages of women till they reach their middle twenties may prove to be most effective in bringing down the level of fertility, for those who marry later are exposed to the risks of pregnancy for a shorter time during their reproductive years. Postponement of marriage with control of illegitimacy can contribute substantially to reduction in birth rates and population growth. This contribution is potentially greatest in countries which have the highest fertility and low average or median age at marriage, like the Philippines.