

Chapter III

OTHER ASSOCIATED ESTIMATES

Sex-age-specific labour force projections provide information on the size and structure of the total future labour supply. The economically active population, like the total population, is subject to a continual replacement movement. It is therefore essential to estimate the flows of entries into and separations from the economically active population during the projection period, i.e. to determine the number of new entrants into the active population and the number of separations from it because of death, retirement or other causes. New entrants into the economically active population increase its size, whereas separations from active life decrease it. Factors on which these two components of the labour replacement movement depend include activity rates on a specified date, age-specific mortality, migration¹ and a long-term assessment of fertility trends.

These associated estimates are essential in forming labour policy, because they make it possible to determine the number of workers who must be recruited in future years if full employment is to be attained; this number is, in fact, equivalent to the total number of entries into the economically active population during the period in question, whereas the difference between the economically active population in the base year and the estimated numbers of that population in the final year of the projection yields only an estimate of the net increase, after allowance is made for losses by death, retirement and withdrawals from working life. The latter procedure therefore yields an arithmetical remainder and gives no indication of the number of new entrants to the labour market. Calculating the number of new entrants into the economically active population and the number of persons who will have to be replaced raises difficult problems of principle. In the first paragraph of the following section the concept of labour supply replacement will be defined. Thereafter methods of estimating replacement movements will be examined. Finally, two methods of calculating the length of working life for future years will be described; these methods provide valuable information on future trends in the labour supply.

¹ In cases where economically active persons withdraw from the labour force by migration, the meaning of the term "retirement", which is generally applied to persons who cease to participate in productive economic life, must be extended to include migrants.

A. LABOUR SUPPLY REPLACEMENT

Analysis of the entries into and separations from the economically active population reveals not only the magnitude of these movements but also the characteristics which differentiate those entering the labour market from those withdrawing from it. A projection of the future characteristics of labour supply replacement may be derived from projections of the active population by sex and by age. Making such a projection is a very complex process. Available statistical data are confined, in practice, to the distribution by sex and, most frequently, by five-year age groups, of the labour supply in the base year and the final year of the projection period. If there is a five-year interval between these two years, life tables may be applied to the totals in each age group (25-29 years, for example) for the following five years in order to calculate the number of survivors in the final year. The total of these survivors is then treated as the 30-34 age group. The difference between this figure and the number of persons predicted for the final year by the projection represents the number of entrants into working life during the period in question from among persons aged 25-29 during the base year.

Such calculations, in reality, measure only crude differences. If, for example, workers in this age group are assumed to leave the labour force during the five-year period because of serious illness, the figure yielded by a calculation procedure to be outlined later in this chapter will represent the difference between the number of men in the 25-29 age group who will enter working life after the base year and the number of men in the same age group who, although active during the base year, leave the economically active population because of illness. In this case, the true number of entrants is greater than the number yielded by the calculation described above. This is only a slight drawback in the case just mentioned, since in this age group there are few separations from the male economically active population. The same is not true in the case of women, many of whom marry or bear children and leave the labour force. Other young women, however, complete their studies and enter working life between the ages of 25 and 29. The absolute figure yielded by the method described earlier is, in fact, the arithmetical difference between two statistically unknown quantities and not a figure for the exact number of entrants into working life in each age group.

The reliability of estimates therefore varies greatly

according to sex. For men, the following assumptions, which only slightly simplify the actual situations, may be made:

(a) All entries into the economically active population occur before the age at which activity rates attain their maximum value, i.e., generally between ages 30 and 35;

(b) There are no separations from the economically active population before this age for reasons other than death, i.e., no survivors retire at an age at which new entrants are still being recruited;

(c) There is only one entry and one separation per worker, i.e. no entry is followed by a separation and subsequent re-entry;

(d) Age-specific mortality rates are the same for active and inactive persons.

When replacement indices are based on these not unduly simplified assumptions, their significance may be somewhat limited in many cases. However, in countries in which suitable statistical data are not available, these assumptions allow the future evolution of the economically active population to be analysed in some detail. Naturally, where sufficiently reliable detailed statistics are available, the more elaborate technique of establishing working life tables can be applied.

Analysis of entries into and separations from the economically active population is largely limited, in practice, to the male population. Replacement movement in the female population is much more complicated because of the changes which occur in women's marital and family status. It is well known that marriage and the presence of children are the factors which most often tend to keep women out of the labour force or cause them to leave it, and that the proportion of such women who seek employment when their children reach school age and family responsibilities no longer keep them at home is sometimes substantial. This tendency to join and rejoin the economically active population at later ages (than males) is naturally more marked in the case of widows and divorced women, because of their greater need to provide for themselves and their children. Adequate data on changes in the female active population are not always available, even in many developed countries. Consequently, while it may be reasonable to accept the assumptions listed earlier in the case of males, they will probably not be valid for females.³ The analysis may, however, if used with caution, give some idea of the future pattern of labour supply replacement in the female economically active population. The calculations yield an estimate of the real number of women who will enter or return to working life, but one which is necessarily somewhat unreal, because the entries and separations are being compared within individual age groups.

B. CALCULATION OF THE REPLACEMENT INDICES OF THE ECONOMICALLY ACTIVE POPULATION

The components of the labour replacement movement are: the number of entries into the economically active population; the number of separations from it; and the net increase — or decrease — in the economically active population. The difference between the economically active population at the beginning and that at the end of each projection period (the usual period being five or ten years) is established by cohort. The procedure is as follows:

(a) Entries into the economically active population comprise persons who reach the usual age of entry to the labour market and who obtain or seek employment during the period considered. For example, the number of new entrants between the ages of 15 and 19 in 1971 comprises persons who are in the age group 10-14 in 1966 and who, according to the projection, will be survivors in 1971 and will obtain or seek work;

(b) Separations from the economically active population comprise persons who leave working life through death or retirement;

(c) the net change — increase or decrease — in the economically active population is the difference between the number of new entrants and the number of withdrawals, either for the whole population³ or for a specified sex-age group. It may show what new employment opportunities must be created. In other words, total labour supply should be offset by total demand, if full employment is to be achieved.

Table 21 shows the working out of these components for each male cohort and for the total male economically active population of Thailand, as projected for the period 1966-1971. The assumption that entries into the economically active population occur before the age of 30, 35 or 40 is a simplification which ignores the fact that there are some separations at earlier ages than these through death or disabilities which prevent further employment. Accordingly, the new entries in table 21 represent the net increase, calculated by the subtraction $A_{t_1}^b - A_t^a$, in which A_t^a is the economically active population in age group a at the beginning t of the period and $A_{t_1}^b$ the economically active population in the following age group b at the end t_1 of the period, the number of entries being calculated by the following formula $A_{t_1}^b - A_t^a \times s$, in which s is the survival ratio between the dates t and t_1 ; this ratio allows for the fact that some of the deaths were of persons who were among the economically active population at opening of the projection period, whereas others were of persons who entered that population during the period. The actual number of entrants during any period is always greater than the net increase.

³ In fact, the pattern of female participation in the labour force just discussed makes it clear that the first three assumptions are unrealistic for the female component of the labour force.

³ Naturally, the net change in the economically active population may also be obtained by simply comparing the total numbers of the economically active population at the beginning and end of the period in question.

It is also useful to know the potential number of entrants into the economically active population, that is, the number of projected survivors for the period t, t_1 who are not economically active. The following formula is used:

$$(p_t^a \times s) - (A_t^a \times s) = (p_t^a - A_t^a)s = p_t^a s (1 - a_t^a)$$

in which p_t^a is the population of age a in period t , and a_t^a is the activity rate of the economically active population of age a in period t . The assumption here is that mortality is the same for the active and inactive populations. The remainder $p_t^a s (1 - a_t^a)$ shows the maximum number of potential additional entries into the economically active population during the projection period in question, if, that is, all persons surviving until the end of the period were economically active.

Separations from the economically active population through death may be calculated by the formula $A_t^a - A_t^a \times s$, which may be rewritten in the form $p_t^a a_t^a (1 - s)$. Here again, it is assumed in this formula that mortality is the same for the active and inactive populations. Separations from the economically active population through retirement or disability, occurring towards middle age or later, are calculated in the same manner as entries, subject to the assumption that a_t^b must be less than a_t^a .

In addition to these three indicators, the replacement ratio and the replacement rate are frequently estimated:

(a) The replacement ratio is the projected number of entries into the economically active population — as a whole or for a specific age group — during the projection period for every 100 separations through retirement or death. This ratio may be considered as indicating either: the pressure of labour supply, represented by the proportion of new entrants to the number of posts left vacant as a result of retirement or death, on labour demand, represented by the existing situation in the

labour market, or the pressure of the labour demand on labour supply, if the number of jobs exceeds the labour supply;

(b) The replacement rate expresses the net increase or decrease in economically active population — as a whole or at a specified age — as a percentage of the total economically active population at the beginning of the period considered, i.e., entries minus separations. This measure is similar in function to the rate of natural population increase — or decline — and may therefore be treated as an indicator of the probable growth of the economically active population. A clear distinction must be made between the number of new entrants and the growth of the economically active population: the former has an extremely important bearing on programmes of employment and vocational training.

The formulas for the replacement ratio and the replacement rate are:

$$\text{Replacement ratio} = \frac{E}{D} \times 100$$

$$\text{Replacement rate} = \frac{E - D}{A_t} \times 100$$

in which E is the number of entries, D the number of separations (through death, retirement or disability) and A_t the total economically active population at the beginning of the period considered. Table 22 provides an example of these labour supply replacement indicators. The source of statistical data used is once again the projection of the male economically active population of Thailand for 1966-1971.

It will be noted that these figures provide a more detailed picture of labour supply replacement than those in table 21: (a) firstly, the number of actual entrants into the economically active population, which is always greater than the number of new entrants (net increase),

TABLE 21
Thailand: projections of new entries and separations for the male economically active population, prepared in 1967

Age group	Male economically active population (thousands)		New entries Separations (thousands)	
	1966	1971	1966	1971
15-19	1,092.7	1,329.2	1,329.2	—
20-24	1,159.5	1,357.3	246.6	—
25-29	1,125.7	1,262.4	102.9	—
30-34	1,030.5	1,125.1	—	0.6
35-39	854.7	1,001.8	—	28.7
40-44	689.7	809.2	—	45.5
45-49	553.5	642.9	—	46.8
50-54	447.4	492.3	—	61.2
55-59	345.9	386.5	—	60.9
60 years and over	502.2	592.1	—	256.0
TOTAL	7,801.8	8,998.8	1,696.7	499.7
Increase in the economically active population		+1,197.0		+1,197.0

SOURCE: Thailand, National Economic Development Board, *Fact book on manpower in Thailand* (Bangkok, 1967).

TABLE 22

Thailand: projections of replacement indices for the male population, 1966-1967

Age group (1)	Net increase due to new entrants (2)	Net decline (3)	Separations due to:			Potential entrants (7)	Actual entrants (8) = (2) + (6)	Unused labour supply (9) = (7) - (8)	Replacement	
			Death (4)	Retirement (5)	Total (6)				Ratio (10)	Rate (11)
15-19 ^a	491.3	—	10.7	—	10.7	1,217.2	502.0	715.2	—	58.6
20-24	264.6	—	13.1	—	13.1	532.7	277.7	254.0	—	24.2
25-29	102.9	—	15.3	—	15.3	198.7	118.2	80.5	—	8.9
30-34	—	0.6	18.1	—	18.1	58.3	17.5	40.2	—	0.005
35-39	—	28.7	21.4	7.3	28.7	33.2	—	4.5	—	2.8
40-49	—	470.4	298.6	171.8	470.4	539.0	—	68.6	—	13.9
50-59										
60 and over	—	—	—	—	—	—	—	—	—	—
TOTAL	858.8	499.7	377.2	179.1	556.3	—	915.4	1,163.0	171.9	4.2

^a Figures based on estimates for male population of age 10-14 years in 1966: numbers estimated at 2,069.1 and activity rate at 40.5.

s shown separately; (b) secondly, in the case of the central age group (30-34), separations due to death exceed the actual number of entrants, so that not only is the supply replacement entirely neutralized, but there is also a reduction in the total labour force; (c) thirdly, it is possible to determine what proportions of all separations from the economically active population are due to mortality and retirement respectively.

Table 22 provides further data, such as the potential number of entrants and the unused labour supply. These data help to give a more comprehensive picture of labour supply, particularly as regards its age structure, and are useful in any consideration of the utilization of over-all labour supply, especially in the case of an economy experiencing a labour shortage.

C. LENGTH OF WORKING LIFE

Another valuable measure for improving the data on the dynamics of the labour force is the length of working life, as determined by the level and duration of labour

force participation and by mortality. Two indicators often used in this connexion are gross years of working life, which depends only on the level of economic activity, and net years of working life, which also takes into account losses due to mortality.⁴ The advantage of these two measures is that they require only a fairly simple manipulation of data from projections of population and of activity rates as illustrated in table 23.

For the computation of the gross years of working life, the age limits of the working life span are set somewhat arbitrarily, usually at fifteen and sixty-five years.⁵ The age interval of fifty or sixty years represents

⁴ *Demographic Aspects of Manpower: Report I: Sex and Age Patterns of Participation in Economic Activities*, 1962 (United Nations publication, Sales No.: 61.XIII.4), p. 17.

⁵ Because of the lack of objective criteria for adjusting the activity rates of marginal groups, the preferred practice is to compute the gross years of working life between the ages of fifteen and sixty-five. Sometimes the upper age limit selected is seventy years and in the case of most developing countries it may be raised to seventy-five years.

TABLE 23
Thailand: gross years of working life^a for male economically active population,
1966 and 1971

Age group (1)	Age group interval (years) (2)	Age-specific activity rate (3)		Gross years of working life in each age group (4) = (2) × (3) : 100		Total gross years of working life (5)	
		1966	1971	1966	1971	1966	1971
15-19	5	67.0	65.0	3.350	3.250	50.745	49.645
20-24	5	85.2	84.2	4.260	4.210	47.395	46.395
25-29	5	95.0	94.0	4.750	4.700	43.135	42.185
30-34	5	97.5	96.5	4.875	4.825	38.385	37.485
35-39	5	97.8	96.8	4.890	4.840	33.510	32.660
40-49	10	96.6	94.6	9.660	9.460	28.620	27.820
50-59	10	91.5	88.5	9.150	8.850	18.960	18.360
60-74 ^a	15	65.4	63.4	9.810	9.510	9.810	9.510

^a Male working ages limited to ages 15-74.

the probable working life span. The number of years during which an individual is economically active is determined very largely by his labour force participation rate, or activity rate the impact of which on working life is expressed by gross years of working life. If, for instance, the activity rate for the age group 25-29 is 95 per cent, an average individual is assumed to spend 95 per cent of that part of his life span, or 4.75 years, in working life (see table 23). The sum of the products of the activity rates and the age interval (in years) for a given age interval gives the total gross years of working life. For the male economically active population of Thailand, that total was approximately 50.7 years in 1966 while, because of an anticipated decline in activity rates for all age groups, the total for 1971, based on the projected activity rates for that year, is estimated at 49.6. Gross years of working life may also be computed for one segment of the working life span. For instance, the total years of working life up to the age of fifty was 31.8 in 1966 and the projections forecast a decline in that total to 31.3 in 1971.

In addition to gross years of active life, gross years of non-working life may also be estimated. This measure represents the difference between probable gross years and actual gross years of working life. For example, total years of non-working life for males up to the age of fifty was 3.2 years (35-31.8) ⁶ in 1966 and that figure is expected to rise to 3.7 years by 1971. These measures show the average gross years which a Thai male would spend in and out of working life if no allowance were made for mortality before the age of seventy-five and if the projected activity rates were assumed to be the true rates.

The measure of average net years of working life, unlike that of gross years of working life, takes into account both the level of economic activity and the mortality rate; it therefore represents the number of working years for a generation including persons whose working life is curtailed by death before they reach retirement age.⁷ The method of computing average net years of working life is shown in table 24, in which the meaning of the symbols is:

(a) The number of survivors at exact age l_x is derived from the life table and shows the number of men and women in a birth cohort of 100,000 who can expect to survive to exact ages fifteen, twenty, twenty-five, etc., given the mortality rates applicable to different ages;

(b) The stationary population between ages x and $x + n$, i.e. ($n^L x$) is the stationary population which may be treated as being the survivors in the age group x to $x + n$ (n being the age group interval);⁸

⁶ The probable working life of a person of fifty or under, assuming that he enters the economically active population at the age of fifteen, is thirty-five years.

⁷ The difference between gross and net years of working life may be explained by a reasoning similar to that used in defining the difference between gross and net reproduction rates as measures of fertility and population replacement.

⁸ When this function is not included in life tables, the formula $n^L x = (l_x + l_{x+n}) \times n/2$ may be used.

(c) Average net years of working life remaining at exact age x , i.e. ($e^o w_x$),⁹ have been calculated here as average years of working life remaining to the population as a whole.

Since the model life table chosen for 1966 shows 78,672 survivors at age 25 and the anticipated number of survivors at that age in 1971 is 81,409, average net years of working life for Thai males survivors at age 25 are 23.6 and 23.5 years respectively. Average net years of working life for survivors at age 60 are 2.5, in both 1966 and 1971 (see table 24).

Comparison of gross and net years of working life establishes probable losses from the economically active population due to mortality (see table 25).

Losses from the male labour supply in Thailand are obviously substantial at present; the same situation is expected to obtain in the early 1970s. Should the overall labour supply fail to satisfy over-all labour demand, appropriate action would probably centre on improving general health and social conditions, which are the main determinants of mortality in most developing countries. When, on the other hand, labour demand is inadequate — i.e. smaller than the over-all labour supply or the level of supply that is tolerated in circumstances of full employment — the total waste of labour resources, as illustrated by the situation recorded in table 25, is even greater than the proportion of inactive persons within the population as a whole.

Analysis of these indicators also makes it possible to gauge the respective effects of activity rates and mortality on economically active life. That may be done by assuming that activity or mortality rates remain constant throughout the projection period; thus, table 26 shows the difference between future net years of working life as determined by these two factors.

D. WORKING LIFE TABLES

Labour supply replacement, like length of working life, can also be studied by means of a working life table. The data on working life given in the table are based on observations made at a specific time. They therefore show conditions which will apply to any generation, if the mortality level and the activity rates do not undergo significant changes, or if they undergo such changes as are characteristic of the mortality or activity rates which are assumed to be likely to prevail in coming years. Working life tables help to make the assessment of future trends more accurate and are therefore very useful in the construction of assumptions

⁹ In working life tables, average expectancy of working life ($e^o w_x$) is defined as the average years of working life remaining to members of the economically active population at a given age, while net years of working life is the ratio between remaining years of working life for the economically active population and remaining years for the population as a whole. Since the numerator is the same in both cases, it follows that the value of net years of working life will always be smaller than the average expectancy of working life, the ratio between the two measures being $l_{wx} : l_x$, i.e. the activity rate.

concerning trends in the economically active population and changes in the demographic structure of the labour force, particularly with regard to sex-specific marginal age groups, which are the most unstable. This technique, when it can be applied to projections, may replace the labour supply replacement devices described earlier and the measures involving length of working life. Data on labour replacement provided by the table of working life is, in fact, more reliable than similar data obtained by the method of simply comparing successive cohorts described earlier.

The methodology of working life tables is discussed in great detail in a number of manuals and other documents which provide examples from various countries.¹⁰

¹⁰ See for example: United States of America, Bureau of Labor Statistics, *Tables of Working Life*, Bulletin No. 1001 (Washington, August 1950); Japan, Institute of Population Problems, *Abridged Working-Life Tables of Japanese Males, 1930, 1950 and 1955* (Tokyo, 1960); United Kingdom, Ministry of Labour and National Service, *The Length of Working Life of Males in Great Britain*, (London, 1959); United States of America, Bureau of Labor Statistics, *Changing Patterns of Working Life*, prepared by S. L. Wolfbein (Washington, August 1963); S. L. Wolfbein, "The length of working life", *Population Studies* No. 3, vol. III, December 1949, pp. 286-294; S. Garfinkle, "The lengthening of working life and its implications", *World Population Conference, 1965, Vol. IV; Migration, Urbanization, Economic Development* (United Nations Publication, Sales No.: 66.XIII.8).

It is perhaps sufficient here to list only the main functions in the tables. These are:

- (a) For each age interval
 - (i) The number living per 100,000 population born alive, that is, the number of survivors at age x from 100,000 live births;
 - (ii) The number living, per 100,000 born alive, who form part of the economically active population, that is, the percentage of the economically active population multiplied by the number of survivors at age x per 100,000 live births;
- (b) Between consecutive age intervals
 - (i) Entries into the economically active population (number, rate per 1,000 of total population or economically active population);
 - (ii) Separations from the economically active population (number, rate per 1,000 of economically active population):
 - due to all causes;
 - through death;
 - through retirement;
 - (iii) Net increase (+) or decrease (-);
- (c) At the beginning of each age interval
 - (i) Average number of years of working life remaining — expectation of working life at

TABLE 24
Thailand: net years of working life for males, 1966 and 1971

Ages ^a (x and $x + n$)	Survivors at exact age l_x	Survivors between ages x and $x + n$ ($n \cdot l_x$)	Activity rate between ages x and $x + n$ (per cent)	Years of working life of survivors between ages x and $x + n$	Total years of working life remaining at exact age x	Average net years of working life remaining at exact age x
(1)	(2)	(3)	(4)	(5) = (3) × (4)	(6) ^b	(7) = (6) : (2)
1966						
15	81,949	406,368	67.0	272,266	2,469,345	30.1
20	80,598	398,175	85.2	339,245	2,197,079	27.3
25	78,672	388,532	95.0	369,105	1,857,834	23.6
30	76,741	378,742	97.5	369,273	1,488,729	19.4
35	74,756	368,308	97.8	360,205	1,119,456	15.0
40	72,567	348,630	96.6	336,776	759,251	10.5
50	66,511	308,216	91.5	282,017	422,475	6.4
60	56,084	214,768	65.4	140,458	140,458	2.5
1971						
15	84,360	418,765	65.0	272,197	2,533,093	30.0
20	83,146	411,388	84.2	346,388	2,260,896	27.2
25	81,409	402,720	94.0	378,556	1,914,507	23.5
30	79,679	393,918	96.5	380,130	1,535,950	19.3
35	77,888	384,455	96.8	372,152	1,155,819	14.8
40	75,894	366,187	94.6	346,412	783,667	10.3
50	70,180	327,234	88.5	289,602	437,254	6.2
60	59,985	232,890	63.4	147,652	147,652	2.5

^a Life expectancy around 1960 is estimated at 52.5; on this point, see "An Evaluation of the Demographic Statistics of Thailand" (United Nations, Population Division, Working Paper No. 2, September 1966). For the purposes of this calculation, life expectancy has been assumed to be 55.0 in 1966, and 57.6 in 1971. The corresponding figures of survivors are taken from the United Nations model life tables.

^b The first figure in column (6) is obtained by adding together the figures in column (5) and the following figures, the figure in column (5) being subtracted from the figure in column (6) for the preceding age group.

age x , for economically active survivors or for all survivors of age x ;

- (ii) Average number of years of non-working life remaining.

The basic assumptions used for estimation purposes are the same as those outlined at the beginning of this chapter. They may be adequate and are unlikely to introduce any significant error in so far as they relate to the economically active male population. The difficulties with regard to the female component have already been mentioned, as have the reservations which must be made, and the caution with which female activity rates must be treated. Nevertheless, since the economically active female population has come to constitute a larger proportion of the total economically active population, better and more accurate data on the characteristics of female working life are required. The numbers and structure of the economically active female population are, as a matter of course, affected by such demographic factors as marriage, fertility, widowhood and divorce. Marriage and the birth of

children are, in fact, the main reasons why women leave economically active life and why they must at certain ages remain outside the economically active population. When analysing the female economically active population account should be taken of certain economic and social conditions, in particular the possibility of expanding that population and the losses which may result from the specific nature of female working life.

The female working life tables which have been constructed in some countries may provide a useful analytical framework for the study of individual aspects of the female labour force, in particular its replacement and the length of working life. An analysis of this type was attempted for the female economically active population of the United States of America in 1940 and 1950.¹¹ In order to determine which are the impor-

¹¹ United States of America, Bureau of Labor Statistics, *Tables of Working Life for Women, 1950*, prepared by S. H. Garfinkle, Bulletin No. 1204 (Washington, D.C., 1957).

TABLE 25
Thailand: comparison of gross and net years of working life of male economically active population, 1966 and 1971

Age	1966				1971			
	Gross	Net	Difference		Gross	Net	Difference	
			Years	Per cent ^a			Years	Per cent
15	50.7	30.1	20.6	40.6	49.6	30.0	19.6	39.5
20	47.4	27.3	20.1	42.4	46.4	27.2	19.2	41.4
25	43.1	23.6	19.5	45.2	42.2	23.5	18.7	44.3
30	38.4	19.4	19.0	49.5	37.5	19.3	18.2	48.5
35	33.5	15.0	18.5	55.2	32.7	14.8	17.9	54.7
40	28.6	10.5	18.1	63.3	27.8	10.3	17.5	62.9
50	19.0	6.4	12.6	66.3	18.4	6.2	12.2	66.3
60	9.8	2.5	7.3	74.5	9.5	2.5	7.0	73.7

^a Percentage of gross years of active life.

TABLE 26
Thailand: comparison of net years of active life and effect of changes in activity rates and mortality, male economically active population, 1966 and 1971

Age	Net years of active life			Total difference (5) = (3) - (2)	Difference due to	
	1966 (1)	1971 (2)	1971 ^a (3)		Differences	
					Activity rate (6) = (3) - (4)	Mortality (7) = (4) - (2)
15	30.1	30.0	30.6	-0.1	0.5	
20	27.3	27.2	27.6	-0.1	0.3	
25	23.6	23.5	23.9	-0.1	0.3	
30	19.4	19.3	19.6	-0.1	0.2	
35	15.0	14.8	15.2	-0.2	0.2	
40	10.5	10.3	10.6	-0.2	0.1	
50	6.4	6.2	6.4	-0.2	—	

^a Based on 1966 activity rates.

tant factors governing the female economically active population, the table includes:

(a) The stationary female population, by marital status and presence of children;

(b) The activity rate, by marital status and presence of children;

(c) The stationary female economically active population, by marital status and presence of children, including the following groups:

(i) All women;

(ii) Single women;

(iii) Wives, by presence or absence of husband:

All married women;

Married women, husband present;

Other marital status;

(iv) Married women, by number of children:

No children;

Children under five years;

Children five years and over;

(d) Estimated annual number of entries into and separations from the female economically active population, by selected demographic factors;

(e) Average number of years of working life remaining for all women and for single women.

The following are some of the features of replacement movement included:

(a) Accession to economically active life (entry and return), as influenced by:

Presence of children of school age;

Loss of husband;

Age;

(b) Separation through:

Marriage;

Birth of children;

Death;

Other causes.

For the construction of these tables, high-quality demographic statistics and activity statistics for the individual demographic variants must be available. Needless to say, such statistical material is not available in many countries. The data provided by working life tables are therefore valuable for computing estimates of female labour supply replacement, the length of female working life, and the size and structure of the female economically active population.