Family Status Life Tables for Belgium: construction and ensuing simulations

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IPD-Working Paper 1987-5

Acknowledgement:

The work reported in this paper has benefitted enormously from the Doctoral Dissertation of Zeng Yi. The time he (Zeng Yi) spent in helping the present author grapple with his thinking, and the generous loan of his computer programme are herewith acknowledged with sincere gratitude.

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#### CONTENTS

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#### Page

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#### 1. INTRODUCTION

The use of Belgian demographic data has often led to the construction of life tables and other tables based on the life-table model. These conventional tables present compact descriptions of how members of specified cohorts leave specified initial states of interest (e.g. the state of being alive in the case of a life table; the single state in the case of a gross nuptiality first marriage table) as a result of experiencing well-defined single events (e.g. death and first marriage respectively, in the examples cited immediately above). The descriptive capacity of single decrement tables of this nature is enhanced when tables taking count of more than one decrement are constructed - "cause of death" tables are well-known examples. Nultidecrement tables of this kind however remain incapable of accounting simultaneously for both increments and decrements such as are present when a cohort is followed up from inception to extinction through different states of interest encounted in-between. The construction of tables suitable for this purpose i.e. "increment-decrement" multi-status tables(\*1) is now within the fairly easy reach of research workers, thanks especially to the efforts of Andrei Rogers and his colleagues.(\*2)

Increment-decrement tables built on Belgian data are few and far between. Willekens and Alii (1982) and Wijewickrema and Alii (1983) are practically alone in reporting on efforts at constructing marital status (increment-decrement) life tables through which the marriage related experience of synthetic female Belgian cohorts can be followed from birth to death.(\*3) The situation is even more distressing as concerns corresponding efforts in the field of family demography. No one, as far as we are aware, has up to now

page i

constructed increment-decrement tables carrying information relevant to the formation, growth, and decline of the family in Belgium. Note however that the Belgian experience is merely part of a general picture, resulting to a large extent from a variety difficulties experienced by family demography the world over. The demography of the family, as Burch (1979), Bongaarts (1983) and Keilman-Keyfitz (1987) have pointed out, has been slow to start and get under way: and rapid progress has been constantly impeded by problems related to the fashioning of adequate concepts, the comparability of definitions used, the non-availability of suitable data and the absence of satisfactory methodological structures.

That multistate demography can be extremely helpful in the study of family demography can be seen in the recent work of Bongaarts (1984), Menken (1985), Watkins (1986) and Zeng Yi (1986). Specifically, the follow-up of the life cycle (or life course) of a cohort from birth to death through intermediate marital states has now been further extended to cover transitions between other family related states. Marital status (increment-decrement) life tables have thus led to family status (increment-decrement) tables: and these (latter) tables provide information related to a number of important issues connected with the family, such as (for example):

- the number of surviving children (of a specified sex) to be attributed to the women/men of a given cohort surviving at a specified age and in a specified marital status.
- the number of such children still resident in their parental home.
- the number of the women/men in question having live mothers, fathers or parents.

- the life expectancy at birth (or at some other interesting age point), of a woman/man belonging to a given cohort, in a specified family related state.

The present article reports on the use of Belgian data for the construction of family status life (FSL) tables, and their subsequent simulated modifications. Data from the censuses of 1970 and 1981 together with registration data for the calendar years adjoining (i.e. on either side of) each census enabled the construction of FSL tables for synthetic female cohorts subject to the nuptiality, fertility and mortality conditions prevailing at each census. Four nuptiality related states figured in this operation: the never-married (NM), the married (MA), the widowed (WI) and the divorced (DI). Simulated modifications of the basic 1981 table were engineered through changes in age specific exposure rates which constituted the starting point of the relevant computing process. A second series of FSL tables incorporating the state of cohabitation (CO) was then constructed using NEGO 4 survey data. Granted the quality and limitations of this data set, only first moves into cohabitation from the never-unioned state (i.e. the state prior to both cohabitation and first marriage) and moves out of first cohabitation into first marriage could be taken into account. Here, as in the earlier series, the FSL table obtained was modified via changes in exposure rates. Fig. 1 illustrates the marital status transitions (in the presence of moves to the absorbing state of death (DE)) accounted for in each of the two series.

#### 2. METHODOLOGY

Detailed explanations of the mechanism used by us in constructing FSL tables are to be found in Zeng Yi (1986). The remarks which follow here merely draw attention to certain important features of the methodology employed.

The following age specific exposure rates, needed as input for computations dealing with the multistate transitions in play, were obtained from registration and census data, which respectively provided the numerators and the denominators necessary for the purpose.(\*4)

- First marriage rates of single women (transition from NM to MA)

- Widowhood rates (transition from MA to WI)
- Divorce rates (transition from MA to DI)
- Remarriage rates of widows (transition from WI to MA)
- Remarriage rates of divorcees (transition from DI to MA)
- Mortality rates, assumed independent of marital status (transition from NM or NA or WA or DA to DE)
- Order specific marital fertility (transition from order n to n+1); n=0,1....4. When n=4, (n+1) was taken as 5+.(\*5)
- Illegitimate fertility rates (transition from 0 to 1); thus all illegitimate births were counted as being of the first order.(\*5)

In addition to the above, the following were extracted from NEGO 4 (cf. note 15) data for the calculations leading to the FSL tables of Series II. (Note that NM in this case refers to the never-unioned)

- First cohabitation rates of the never-unioned (transition from NM to CO)
- First marriage rates of the never-unioned (transition from NM to MA)

- First marriage rates of cohabiting women (transition from CO to MA)

The follow-up of each synthetic female cohort studied is effected from birth, when all women are never-married (never-unioned, in Series II), of zero parity and with no surviving children; and through each subsequent age interval where transitions occurring between nuptiality and fertility related states lead to the cross-classification of cohort members by marital status, parity status and maternal status (giving the number of surviving children). The follow-up ends with the total extinction of the cohort due to death. Following a suggestion of Bongaarts (modified and made operational by Zeng Yi), parity and maternal status changes in general are supposed to occur in two steps during each age interval which is divided into two equal parts for this purpose: marital status transitions and death are taken as occurring in the middle of the interval. This procedure helps to lighten the demands on computer memory space on the one hand and lessen problems associated with the presence of small numbers arising from cross-classification of the data on the other. The mathematics which takes account of all the changes experienced by the members of a cohort (a female cohort in our case) and leads to the estimation of  $l_{m,p,e}(x)$ , the number of survivors at a specified age x cross-classified by marital (m), parity (p) and maternal (c) status, is as follows. (All ages referred to are exact ages: and only Series I is dealt with in detail for simplicity of presentation).

Interstate transitions (including moves to the absorbing state of death) taking place during all ages a (say) prior to x have to be taken into account in the computational process leading up to  $l_{m,p,e}(x)$ .(\*6) Thus the computation of  $l_{m,p,e}(x)$  at each age x call for a series of calculations concerning changes occurring between ages a and (a+1), where a takes the

successive values 0, 1, 2,.... (x-1). This link between a and x is to be found in  $l_{m,p,c}(x,a)$ , which stands for the number of women aged a with marital status m, parity state p and maternal state c; c being defined as the number of children born before age a who survive to age x (the age for which  $l_{m,p,c}(x)$  is required).(\*7)

Note that a cohort formed at age 0 is only exposed to death up to age 15, when other events begin to occur. Reproduction occurs only between 15 and 50, whereas marital status changes go on occurring till death.

Breaking the age interval a, (a+1) into two equal parts, we have

- 1) in age interval  $a_{i}(a+h)$  (h = 1/2 in the discussion which follows)
  - a) for ever-married women (m = 2, 3 and 4 representing the married, widowed and divorced states respectively)

$$l_{m,p,c}(x,ai) = l_{m,p,c}(x,a) \cdot (i - b'_{p+1}(a,m)) + l_{m,p-1,c-1}(x,a) \cdot b'_{p}(a,m) \cdot s(x-a-h) + l_{m,p-1,c}(x,a) \cdot b'_{p}(a,m) \cdot (1 - s(x-a-h)) \cdot \dots \cdot (1)$$

where:

al in  $l_{m,p,c}(x,al)$  indicates that we are dealing with women aged (a+h) who have experienced parity and maternal state transitions between a and (a+h), but no marital state or death related moves.

 $b'_{p}(a,m) =$  the probability of moving from parity p-1 to p for women between ages a and a+h. For parity transition from p to (p+1) we have, analogously,  $b'_{p+1}(a,m).(*8)$ 

s(x-a-h) = the probability of survival of children from 0 to age (x-a-h).

The right hand side of Eqn. 1 accounts for losses due to parity transitions from p to (p+1), and increases due to parity changes from (p-1) to p both for women whose maternal status moves from (c-1) to c as well as for those whose maternal status remains unchanged at c.

b) for never-married women (m = 1)

$$l_{m,p,c}(x,ai) = l_{m,p,c}(x,a)$$
 (2)

The parity and maternal status changes of never-marrieds are considered later on.

2) <u>at age (a+h)</u>

Death as well as all transitions between marital states, which are supposed to occur here (i.e. at age a+h), are dealt with <u>via</u> the use of standard equations found in multi-state demography of the Rogers type.(\*9) The end-result of these multi-state manipulations can be symbolised as follows:

$$l_{m,p,c}(x,a2) = \sum_{n=1}^{4} r_{n,m}(a) \cdot l_{n,p,c}(x,a1)$$

where:

- $r_{nm}(a) =$  the probability that a woman aged a in marital status n (n=1,2,3 or 4) will find herself in marital status m (m=1,2,3 or 4) when she is (a+1) years old.
- a2, in 1<sub>m,p,c</sub>(x,a2), stands for age (a+h) just after the operations supposed to be taking place at this age have been effected.

3) between ages (a+h) and (a+1)

Parity and maternal status changes in this interval are dealt with differently for different groups.

a) The case of widows and divorcees (n = 3 and 4 respectively).

The equation used here parallels Eqn. (1). The changes introduced here refer in general to the age interval under consideration. Thus

 $l_{m,p,c}(x,a+1) = l_{m,p,c}(x,a2) \cdot (1 - b'_{p+1}(a+h,m)) + l_{m,p-1,c-1}(x,a2) \cdot b'_{p}(a+h,m) \cdot s(x-a-h) + l_{m,p-1,c}(x,a2) \cdot b'_{p}(a+h,m) \cdot (1 - s(x-a-h)) \dots (3)$ 

Note however that  $b'_{p}(a+h,m)$  in Eqn. (3) is not equal to  $b'_{p}(a,m)$  in Eqn. (1).(\*10) Analogously  $b'_{p+1}(a+h,m)$  is not equal to  $b'_{p+1}(a,m)$ .

- b) Equation (3) looks after never-marrieds (m = 1) too, with the proviso that  $b'_{p}(a+h,m)$  is replaced by  $b_{p}(a,m)$ , which covers the interval a,(a+1). This substitution is necessary in view of the fact that the fertility related changes of never-marrieds have not been accounted for earlier. ( $b'_{p+1}(a+h,m)$  is similarly replaced by  $b_{p+1}(a,m)$ ).
- c) The case of women in the married state (m = 2).

This group  $(l_{2,p,c}(x,a2))$  is composed of two parts characterised by significantly differring fertility behaviour: those who marry for the first time within a, (a+1) and others. The former,  $l'_{2,p,c}(x,a2)$  (say),

```
are r_{1,2}(a), l_{1,p,c}(x,a1) in number: the latter, l''_{2,p,c}(x,a2) (say), are consequently equal to l_{2,p,c}(x,a2) = l'_{2,p,c}(x,a2).
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Equation (4) takes care of both these groups .

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l_{2,p,c}(x,a+1) = l''_{2,p,c}(x,a2) \cdot (1 - b'_{p+1}(a+h,2)) + l''_{2,p-1}, (c-1)(x,a2) \cdot b'_{p}(a+h,2) \cdot (s(x-a-h)) + l''_{2,p-1,c}(x,a2) \cdot b'_{p}(a+h,2) \cdot (1 - s(x-a-h)) + l''_{2,p-1,c-1}(x,a2) \cdot (1 - F) + l''_{2,p-1,c-1}(x,a2) \cdot F \cdot s(x-a-h) + l''_{2,p-1,c-1}(x,a2) \cdot F \cdot (s(x-a-h)) + l''_{2,p-1,c}(x,a2) \cdot F \cdot (s(x-a-h)) + l
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where F is the proportion of women who give birth to children in their year of first marriage.

When  $l_{m,p,c}(x)$  has been worked out in this manner for all x (x=0 to 80 in our case), a further classifying characteristic, k, concerning the survival of the parents of the women in our cohort was added; and this for all x too. This transition from  $l_{m,p,c}(x)$  to  $l_{m,p,c,k}(x)$ , k representing the survival of one (or both parents, as desired), was obtained by equations based on ideas found in Goodman, Keyfitz & Pullum. (1974, 1975) (\*11) Using standard multi-state calculations, it is now possible to work out life expectations(\*12) at specified ages and in specified states.

In our computations the fertility of widows, divorcees and never-marrieds was taken to be the same.

The same basic equations hold good when the state of cohabitation is incorporated, as in Series II. The number of nuptiality related states is however then equal to five, and the fertility of cohabiting women was taken as being the same as that of any other category of non-married women.

In Series I, apart from FSL tables based on conditions prevalent around the census dates of 31-12-70 (FSL Table C1) and 1-3-81 (FSL Table C2), others based on certain modifications of the exposure rates used in C2 were simulated. Changes following on modifications of marriage related rates and order specific marital fertility rates were thus investigated. In each of these modifications (M1, M2,....M5) of C2, changes in the age specific rates corresponding to a given process were effected in such a way that the related entries of the events column in a table of the life-table kind built with the original exposure rates were changed by the same fraction. (\*13) Thus the "intensity" of the process dealt with - i.e. the intensity in the presence of other competing or disturbing processes - could be changed to any desired value. The "intensities" of nuptiality and fertility related processes as well as of widowhood figuring in C1, C2, M1,....M5 are given in Table 1. M1 and M2 differ from C2 in that they carry fertility related schedules with "intensities" lower than that of C2. M3, M4 and M5 have the same fertility schedules as C2, M1 and M2 respectively; but carry a common first marriage schedule different from that common to C2, M1 and M2. They also differ from C2, M1 and M2 as regards their remarriage and divortiality schedules.(\*14)

The basic FSL table in Series II (i.e. Table N1) was constructed with certain exposure rates extracted from Nego 4(\*15) data and others (i.e. the

rest) already used for the building of C2. The following transitions are covered by the rates drawn from Nego 4:

- never-unioned to marriage (NM to MA)
- never-unioned to cohabitation (NM to CO)
- cohabitation to marriage (CD to MA).

Modifications of the exposure rates related to these three sets of transitions led to the different variants of N1 investigated; among which the following merit special mention:

- Table N2, which aims at showing what would happen if the push out of the never-unioned state around 1980-81 were the same as that found in Nego 4. (The substantive hypothesis behind this idea is that the fundamental urge to partner formation remains unchanged from one epoch to another; and that any changes that do occur merely affect the modalities through which partner formation manifests itself in society). For this purpose, rates covering the NM (never-unioned in Series II)-to-MA transition were reduced till they reached the low 1980-81 values of the first marriage rates used in C2, while the never-unioned-to-cohabitation rates were increased by the same amount. Nego 4 patterns of cohabitation to marriage were retained unchanged.
- Table N\*, which represents a scenario in which women in cohabitation experience total disenchantment as regards marriage - such a situation seems to be the end-point of the current evolution in the matter witnessed in Western Europe - while other categories of women continue to behave as in N2. Thus all exposure rates used here are identical to

those used in N2 except for cohabitation-to-marriage rates which are now made equal to zero.

Other modifications of N1 experimented with will be referred to as N3, N4,... if and when necessary.

#### **3.RESULTS: DESCRIPTION AND EXPLANATION**

The computer output associated with any one FSL table is fairly voluminous and cannot conveniently be presented here in its entirety. However, both for its own intrinsic importance and because the reader will find it helpful to have some concrete idea of the type of detailed information furnished, a selected sample of tables drawn from the total output associated with Table C2 (which covers conditions at the 1981 census) is given at the end of the present report. The tables presented there are the following:

Al, a set of three tables showing the age distribution of the survivors (absolute numbers and percentage) of the synthetic female cohort of C2 by <u>marital</u> and <u>"marker"</u> status (which, in this case, refers to the survival (Yes/No) status of mother). i.e.

A 1 1 Survivors by marital status only. A 1 2 Survivors having a mother, and by marital status. A 1 3 Survivors not having a mother, and by marital status.

A2, a set of fifteen tables giving the age distribution of the same set of survivors (absolute numbers and percentage) by <u>marital</u>, <u>maternal</u> (i.e. number of surviving children) and <u>"marker"</u> status (same as before). i.e.

A 2 1 1 All marital states together

A 2 1 2 " " ", survivors having a mother.

A 2 1 3 " " " " 11 nо n A 2 2 1 Never married women - all ", with a surviving mother A 2 2 2 Ħ A 2 2 3 " ", " no 11 n A 2 3 1 Currently married women - all A 2 3 2 u ", with a surviving mother ti " , " no A 2 3 3 63 a A 2 4 1 Widows - all ", with a surviving mother A 2 4 2 ", " NO Ð n A 2 4 3 A 2 5 1 Divorcees - all ", with a surviving mother A 2 5 2 A 2 5 3 " , <sup>#</sup> NO 11

- B1, a set of three tables B11, B12 and B13 (corresponding respectively to A11, A12 and A13 as regards age and status classification) which carry life expectation values in different states at different ages. Each of these values represents the mean number of years that would be lived in a specified state, from a specified age onwards, by a woman alive at that age <u>whatever be her (state) status at that age.</u> Such a "population based" measure was computed in preference to a "status based" measure (where status reference at the age concerned would be explicit) since it lends itself more easily to cross-table comparisons.
- B2, with B211, B212, B213.... B253 which similarly show life expectation values and correspond, as regards format, to A211, A212, A213.... A253.

Reading in Table A12, for example, it can be seen that there are 18318 married women aged 20 surviving out of an initial cohort of 100 000, each of whom has

her mother alive. The corresponding entry in Table B12 is 22.13; signifying that each of the 98 346 women alive at age 20 (see Table A 1 1), whatever be her state status at this age, can expect to spend 22.13 years in the married state while her mother is alive. Further, to continue with the same story,

- only 6667 of the 18318 married women referred to above are found to have exactly one surviving child (see Table A232); and
- (2) only 8.02 years, out of the 22.13 mentionned above, will(expectedly) be spent while only one child is alive (see Table B232).

Other sets of tables (not presented here for reasons stated above) which parallel A1, A2, B1 and B2 in structure, while differing from them only as regards the definition of the "marker" status used, form part of the output of C2.(\*16) The following definitions of the "marker status" were used in this connection:

- 1) One or both parents alive.
- 2) Both parents alive.

Note that all computations for the age range 15-50 were effected by single years even though the results are presented for five year age intervals only.

#### 4. COMMENTS

Limitations of space make it impossible to comment adequately on both the wealth of information carried in any single FSL table as well as on the results of all the useful cross-table comparisons that can be made. A selection of topics for comment is thus inevitable; and the accompanying

discussion has necessarily to be curtailed. To start with, attention is focussed on those FSL tables which were constructed with a minimum of supplementary hypotheses. C1 and C2, which are built directly with data belonging to two real situations, are obviously the cases in point. These two tables together with their modifications M1, M2,.... are characterised by only four states of interest. They are now subjected to comment. Note that each of the tables discussed carries information about the life cycle (or course) of a female synthetic cohort.

#### 4.1. Series I: Tables with four marital states only

The combined effect of changes in all the processes at work (i.e. mortality, first marriage,.... etc.) when moving from one real situation (1970-71) to another (1980-81) can be seen by comparing C1 and C2. Two supplementary FSL tables C1\*, and C1\*\* (say) were constructed in an attempt at separating effects due only to mortality changes from those due to behavioural differences:

- C1\* differs from C1 only in that it carries the (female) mortality schedule of C2. A comparison of C1 and C1\* thus shows how female mortality differences (between 1970-71 and 1980-81) alone affect the picture. C1\* and C2, on the other hand, standardize for (female) mortality differences and give only the results of other changes.
- C1\*\* is identical to C1\* except for the use of the widowhood schedule of
  C2. The standardising process addresses itself here to the control of
  widowhood.

Fig. 2, carrying curves extracted from C1, C2, C1\* and M3(\*17) (which, in common with M4 and M5, is characterised by hypothetical low marriage - high

divorce schedules), shows how morality and behavioural differences affects cohort members as they age through life in different marital states. Going from C1 (through C1\* and C1\*\*, when necessary), to C2 and then on to M3 is equivalent to progressing in the direction of declining mortality, decreasing nuptiality and increasing divorce. There are hardly any surprises.

- The increase of never-marrieds at each age (see Fig. 2A) is almost entirely the work of decreasing first marriage rates. That declining mortality has very little effect of its own can be seen in the curves for C1 and C1\* which are practically identical and cannot be seen as separate in the Figure.
- 2) The fall in the numbers of currently married women (see Fig. 2B) is largely due to decreasing nuptiality (both first and remarriage) and the increasing incidence of divorce. Changes in female mortality and widowhood are seen to have a very slight opposite effect.
- 3) The lowering of curves associated with the number of widows begins to be clearly noticeable from about age 50 onwards. An important fraction of this drop (in going from C1 to C2) within the age range 50 and 65 has to be attributed to the sole action of declining widowhood rates as seen with the help of the C1\*\* curve (not presented in Fig. 2). Ameliorations in living condition as seen in the decline of female mortality rates between 1970-71 and 1980-81 increase the number of widows i.e. oppose the influence of changes in widowhood (compare C1 and C1\*). The continuation of fall from C2 to M3 can of course be only due to declining marriage and increasing divorce.

4) The rise in the number of divorcees is due to rising divorce incidence together with the declining importance of the remarriage of divorcees: declining rates of first marriage and the remarriage of widows act in the opposite direction; and differences of mortality and widowhood were found to be of negilible consequence.

Mere numbers surviving in specified states and ages do not give any idea of the length of stay experienced in any given state. Life expectation statistics carry this kind of information. Comparisons of these statistics can be made using the sets B1 and B2 already described together with similar sets formed in the other FSL tables constructed (i.e. in C1, M1, M2,....). Ages 15, 50 and 65 - when (respectively) nuptiality and fertility related processes start, fertility ends and active life comes to an obligatory halt - were chosen as points of particular importance. "Population based" expectation of life values in the four marital states of interest at ages 15, 50 and 65, for the FSL tables in question, are given in Table 2.

Disenchantment with both marriage and the married state is very much in evidence as we move from C1 (representing conditions in 1970-71) to C2 (built on 1980-81 data). At age 15, for instance, the rise from 9.0 to 14.23 in life expectation values related to the never-married state already points to a growing refusal of marriage: accompanying female mortality differences have hardly any effect of their own - 9.0 in C1 is merely changed to 9.08 in C1\* through the action of mortality differentials. The flight from the wedded state is further highlighted in

 the fall experienced from 40.92 to 36.50 in the face of the counter tendency brought on by changes in the rates of both female mortality and widowhood which, on their own, would have succeeded in raising life

expectation values in the married state from 40.92 to 41.54 and 42.84 respectively.

2) the increasing importance of life in the divorced state - witness the change from 1.45 to 3.66 - which owes very little to differentials related to female mortality and/or widowhood: these differentials are respectively responsible only for changes from 1.45 to 1.51, and from 1.51 to 1.52.

This same picture - the increasing importance of the never-married and the divorced states at the expense of the married state - is also found at ages 50 and 65 as is clearly shown in Fig. 3 which, by including life expectation values taken from M3, brings the trend in question into greater relief.

Our discussion has up to now centred on cohort members as such and on cohort members in relation to their partners (i.e. "partners" from the standpoint of family formation). The concept of the family however carries with it the idea of children too and, at second remove, includes also that of the parents of the persons founding a family. Parents, together with their children are said to form the "nuclear" family; while reference to other related persons (<u>ita</u> grand-parents, cousins etc.) brings in the idea of the "extended" family. In this study, the concept of the extended family is taken as covering only the parents of cohort members. Information about the nuclear family as also about the extended family (in the restricted sense just indicated) is of the highest interest for planning, both at the individual and societal levels. During what interval of time will a woman be busy about one child? How long will she have to look after two children?... How long will she have to look after her own mother. etc. etc. These questions and many others of a similar nature are related to such problems as social security,

insurance, savings, spending, etc. Answers can to some extent be obtained by examining our FSL tables.

Information concerning cohort members in relation to their surviving children is found in Tables 3A and 3B. Table 3A gives the number of women ((a) all women and (b) married women) surviving at selected ages (35, 50 and 65) in specified maternal states. Table 3B carries the corresponding life expectation values. Many of the entries showing the number of survivors associated with M2, M4 and M5 in Table 3A are disturbingly so low compared to corresponding values in C2(\*10) that one hesitates to accord any substantial degree of credibility to the scenarios from which they spring. M2, M4 and M5 will therefore be hereinafter left out of the discussion. (The entries in tables 3A and 3B show that M1 is very close to M4. It has however been retained for further inspection and discussion since it serves to illustrate the direction of changes to be expected following falls of fertility rates in the future). The following points are worthy of note in connection with the passage from C1 (portraying 1970-71) to C2 (standing for 1980-81).

- Observable changes in values of survivors are almost entirely due to behavioural differences: mortality differences - compare C1 with C1\*, and C1 and C1\* with C1\*\* (see Table 3A) - seem to have negligible effects except (perhaps) in the case of women aged 50 with two living children.
- In spite of the fact that fertility declines from C1 to C2, the number of women (whether married or not) with 1 living child (the "1 CH" category of Figs. 4A and 4B) is seen to increase at all the ages considered. This can to a large extent be explained by the fact that women in the "1 CH" category associated with C1 are more likely to move on to the next category (i.e. "2 CH") than their counterparts in the C2 situation.(\*19)

An analogically similar explanation holds good for increases in values in the "2 CH" category at ages 50 and 65 in Fig. 4A.

- The number of women with both 3 as well as 4 surviving children drops unhesitatingly: for instance the percentage falls registered for women with 3 living children at ages 35, 50 and 65 are respectively as high as 40.4, 39.0 and 37.8 for all women and 42, 41.8 and 36.7 for married women. (See Table 3A, Fig. 4A and 4B).
- Figs. 4 C and 4D are very similar to 4A and 4B respectively and the remarks already made about the number of surviving women specified by their maternal status can be closely parallelled by remarks about corresponding life expectation values (see also Table 3B). Taking once again the case of women with three surviving children, one notes that life expectation values at ages 35, 50 and 65 fall respectively by as much as 37.2%, 36.1% and 33.7% in general and by 39.8%, 38% and 33.3% when we deal with the "3 CH" state of married women.

The passage from C2 to M3 (M3, as compared to C2, has lower marriage and higher divorce rates) results in lower values both of survivors as well as of life expectancy in all cases (see Figs. 4A, 4B, 4C, 4D) except when we are dealing with the "1 CH" category of all women (i.e. women in all marital states together - see Figs. 4A 4C). The lowering of values generally observed and just referred to is to be expected in view of (1) the lower nuptiality and higher divortiality of M3 which tend to reduce numbers as well as length of stay in the married state together with (2) the fact that there is a close positive association between fertility and the married state. The slight rise - by way of exception - observed in the "1 CH" category is to be explained by the relatively greater importance given, in our FSL models, to the "1 CH"

category when one has to deal with never-married - they (never-marrieds) never get beyond the "1 CH" state. The passage from C2 to M1 (M1 is equivalent to C2 except for lower fertility schedules) carries with it the obvious signs of declining fertility: and this hardly calls for comment.

These comments about certain features of the nuclear family in Belgium are brought to a close with a final remark concerning the importance of the "2 CH" category. Maternal status specified by two surviving children shows itself as being of foremost importance in C1 and C2 both as concerns the number of women surviving as well as their life expectations (see Figs. 4A, 4B, 4C and 4D). The importance of "2CH" vis-à-vis "1 CH" is however already on the way out and the future, as concretised in M3 and M1, is one in which the "1 CH" category will take first place.

Some idea as regards trends concerning the extended family ("extended", in the sense already explained) can be obtained from Tables 4A and 4B. (Figs. 5A and 5B give further illustration to some of the values extracted from these tables). Since the tables and the figures speak for themselves sufficiently, we wind up this discussion of Series I by drawing the attention of the reader to the fall in importance (both in numbers and corresponding life expectation values) at all ages of the three generation family (i.e. cohort members together with their surviving parents and children) with three children - see b, c, d at different ages in Tables 4A and 4B - accompanying the passage from C1 to C2. This takes place in the clear presence of an universal rise in other life expectancy values found in Table 4B.

#### 4.2. Series II: Tables with five marital states

Whereas Series I contains at least two FSL tables - i.e. C1 and C2 each of which was built on data extracted from a real situation, Series II is composed only of tables constructed with amalgams of data: data drawn from differing real situations. The contribution of Nego 4 to these amalgams, though indispensable, was riddled with difficulties connected with the problem of small numbers.(\*20) Thus exposure rates computed with Nego 4 data - they concern transitions taking place before first entry into the married state were pronouncedly erratic, and had to be subjected to heavy smoothing before use. FSL tables built with these rates can consequently be used mainly (and almost exclusively) (1) to obtain some idea of the different magnitudes involved and/or (2) for the purposes of sensitivity analysis.

Our comments as regards Series I will therefore be very summary and limit themselves to the lessons which can be drawn from a reading of Table 5. (Table 5 carries life expectation values at selected ages in different marital states, for chosen FSL tables: i.e. for C2 and for the series N1, N2.... obtained by working with five marital states (cohabitation, C0, being added to the four already used)).

The introduction of cohabitation into the life cycle circuit is seen to have its most drastic effect - we are now dealing with the passage from C2 to N1(\*21) - on life expectancy in the NM state. Reductions in life expectancy are brought in at all ages. These reductions are further seen to be used up largely to increase life expectancy in the married state: especially at lower ages. While it is fairly easy to see why the length of stay in NM is reduced by almost 50%; (\*22) the meagre gain (only 0.08) registered by CO is surprising. This however is due to the particular exposure rate schedule connected with transitions from cohabitation to marriage actually used. Women who do begin to cohabit are, thanks to the schedule in question, quickly moved out of cohabitation and into marriage by transition probabilities of around 0.6 (per single year) from age 18 onward; probabilities which, moreover, attain 0.9 at the age of 26 and retain that value thereafter.(\*23)

FSL table N2 (cf. <u>supra</u> for description), in which the process of moving to cohabitation is made stronger while that of moving to first marriage is made weaker, brings us closer to the real situation of 1980-81. The resulting changes, as read in Table 5, are as yet very small. FSL tables N3, N4 and N5 show the effects of making the process of moving from cohabitation to marriage weaker than in N2.

- N3 = N2, but with cohabitation-to-first marriage rates equal to half those used in N2.
- N4 = N2, except for a different tail in the cohabitation-to-first marriage schedule: whereas in N2 probabilities remained at 0.9 from age 26 onwards, here they decrease rapidly from their value (0.75) at age 25 to zero at age 30. Thus while the scenario in N2 supposes that hardly anyone remains in cohabitation for ever - i.e. they all marry - here (i.e. in N4) cohabiting women are supposed to give up all ideas of marriage by the age of 30.
- N5 = N4, with cohabitation-to-first marriage rates equal to half those of N4.

The FSL tables N1, N2.... N5 constitute a series that probably approaches the real 1980-81 situation progressively: that at least is what seems to be

indicated by the life expectation values of Table 5 which get closer to the corresponding values of C2 as we go from N2 to N5. A limiting boundary situation to the kind of trend experimented with is portrayed in FSL table N\* (cf. <u>supra</u> for description) where all possibility of the marriage of cohabiting women is reduced to naught. One notes that this scenario of complete rejection of marriage by cohabiting women is not all that far removed from the practice actually in vogue in certain countries of Western Europe. Life expectancy values in the state of cohabitation (21.77, 11.71 and 6.74) computed in this case come close to or even surpass corresponding values related to the married state. While admitting that such values do show a certain degree of artificial magnification - there will perhaps always be cohabitors who enter the married state either directly or after intermittent periods of single living - one notes the important proportions which the phenomenon will probably attain in the future. Planners will thus certainly have to take serious account of cohabitation in their calculations.

#### 5. CONCLUDING REMARKS

A substantial part of the work described above and commented on results from calculations based on transversal data. The resulting FSL tables succeed only in describing the life cycle (or life course) of synthetic cohorts. While such descriptions do give valuable information about what happens in specific calendar years, and consequently about existing trends; they remain artifacts that are troubled by problems well-known as afflicting transversal measures. Given the fact that our basic tables C1 and C2 relate to calendar years found in a period of important change,(\*24) a note of caution must be sounded regarding the risk of overemphasising the <u>cohort</u> context and aspect of the computations arrived at. Retrospective observation through surveys could help

to get past this problem, but only at the expense of introducing other difficulties, among which the problem of small numbers looms large and ominous. While awaiting a system of detailed follow-up observation at the nation-wide level,(\*25) one has per force to be content with the use of census data for the purposes in question.

The structure of the FSL tables constructed by us can be brought closer to reality by taking into count important transitions not figuring in the above discussion: e.g. second entry into cohabitation by never-married, divorced and widowed persons. However apart from the problem of the non-availability of adequate data needed for this purpose, it is also necessary to ensure that a minimum simplicity of model be maintained.

The work discussed in this article only concerns the family looked at from the point of view of kinship. No reference at all has been made to the family as a group (of persons) identified or characterised - partly, it is true; but essentially - by location of dwelling place or habitation (i.e. where a common or shared life is lived). The concept corresponding to this formality of the problem is that of the household. It hardly needs to be said that a study of household dynamics in Belgium has to be made - a step in that direction should logically follow the effort reported on in the present article.

To summarize, our FSL tables enable us:

 to quantify in simultaneous fashion, and as part of a total picture, the declining importance of the married state, which takes place concomittantly with the rise in importance of both the divorced and never-married states.

- to underline the fact that a good part of the increasing importance of the never-married state is due to the increasing presence of cohabitation.
- 3) to have some idea of the extent to which satisfaction with cohabitation with accompanying indifference to marriage can influence the picture even when (as in all models Ni to N5 and N\*) first marriages continue to occur as in 1980-81.
- 4) to note the increasing importance of one-child families, the decline of the two-child family and the fading away of families with more than two children.

Fig. 1: Marital status transitions accounted for in the construction of family status life tables using Belgian data.



Figure 2 : Survivors in different marital states at different ages according to chosen family status Life tables (initial size of cohort = 100 000)



2 A) In Never Married State

2 B) In Currently Married State





### 2 C) In Widowed State











1970-71 : C1 1980-81 : C2

1980-81\* : C2\* = M3 (.....same for M4, M5)

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Figure 4 : Female survivors at selected ages by maternal status (i.e. number of surviving children) for chosen family status life tables



Figure 4A : All women

Figure 4B : Married women





# Figure 4 (contd.) : Life expectation at selected ages in specified maternal status for chosen family status life tables





Figure 4D: In Married State










2 CH = 2 surviving children 3 CH = 3 surviving children

	Ci	C2	MI	M2	M3	M4	MS	
First marriage	.966	.893	.893	.893	.850	.850	.850	
Widowhood	.782	,754	.754	.754	.754	.754	.754	
Divorce	.126	.249	.249	.249	.500	.500	.500	
Remarriage of widows	.830	.684	. 684	. 684	.650	.650	.650	
Remarriage of divorcees	. 988	.970	.970	.970	.850	.850	.850	
First order marital births	,999	.998	.900	.810	.998	.900	.810	
Second " " "	.947	.915	.850	. 560	.915	.850	.660	
Third " "	.859	.754	.650	.440	.754	.650	.440	
Fourth " "	.871	.783	.650	.400	.783	.650	.400	
Fifth+ " " "	.965	.936	.850	.600	.936	.850	.600	

Table	I ;	The "	inten	sities	" corr	espondir	ig to	ехрози	re rati	es used	in	schedu	les	for di	fferent
		proce	55 <b>e</b> 5	in the	basic	Family	Stati	is Life	(FSL)	tables	Ci	and C2	and !	their	modifications
		(M1 t	hroug	h M5)											

2

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C1 = FSL table for situation in 1970-71

C2 = FSL table for situation in 1980-81

M1, M2,....M5 = Modifications of C2

N.B.: See text for the significance of "intensities".

ge	Marital Status		F	SL Table		
		C1	£1 <del>*</del>	C1**	C2	C2*
5	NM	9.00	9.08	9.08	14.23	16.07
	MA	40.92	41,54	42.54	36.50	27.58
	¥I	9.71	11.14	10.13	8.88	5.79
	DI	1.45	1.51	1.52	3.66	13.83
0	NM	.97	1.04	1.04	3,25	3.99
	MA	16.37	16,87	17,84	15.56	10.20
	村王	9.65	11.07	10.10	8.83	5.68
	DI	.83	.88	.88	2.23	10.00
5	NM	.53	.59	.59	1.85	2.19
	MA	5.04	6.36	6.99	6.18	3.82
	٨I	8.39	9.75	9.12	7.90	5.00
	DI	.44	.49	.50	1.27	6.19

# Table 2: Life expectation in different marital states at ages 15, 50 and 65 for chosen Family Status Life tables

C1 = 1970-71 FSL table C2 = 1980-81 FSL table C1\* = 1970-71\* = C1 with female mortality of C2 C1\*\* = 1970-71\*\* = C1\* with widowhood rates of C2 C2\* = 1980-81\* = C2 with hypothetical marriage and divorce schedules = M3 (... same for M4, M5)

N.B.: Life expectation values are "population based" (see text).

Age	Surviving		lant New Mir (Hit (1999 Life and and Mea Inst Ann 1994 )	F	amily Sta	tus Life	Table					
-	Children (CH)		CI	C1*	C1**	C2	M1	M2	M3	M4	M5	
35	1 CH	a	26615	26502	26491	31490	17084	20555	32073	18281	21396	
		b	24237	24102	24140	25729	12488	15758	21442	10445	13119	
	2 CH	3	34976	35498	35501	33594	14541	9181	30765	13428	8466	
		b	33687	34186	34245	31288	13491	8523	25511	11007	6949	
	3 CH	З	17185	17639	17647	10236	3750	1286	9026	3330	1145	
		ь	16690	17130	17161	9688	3535	1210	7830	2856	977	
	4 CH	a	5112	5189	5192	1793	514	93	1559	450	82	
		b	4985	5060	5069	1706	487	88	1373	392	71	
50	1 CH	a	23983	23952	23932	30905	17175	20745	31824	18813	22023	
		b	20716	20663	20775	23892	12093	15181	17542	8989	11175	
	2 CH	а	32209	32808	32805	32943	14268	9106	30171	13178	8388	
		b	29176	29716	29892	28347	12259	7833	20072	8702	5561	
	3 CH	а	17808	18395	18406	10861	3926	1342	9488	3455	1184	
		b	16230	16765	16868	9449	3409	1164	6603	2382	813	
	4 CH	a	5479	5444	5447	1974	573	103	1698	495	89	
		b	4998	4962	4993	1722	500	90	1197	347	63	
65	1 CH	a	21586	22045	22028	28235	15612	18651	28992	17047	19774	
		b	13507	13780	14862	16971	8640	10656	10984	5905	7091	
	2 CH	ā	28151	29392	29389	29275	12634	8015	26793	11661	7380	
		b	18357	19168	20685	19343	8338	5294	11472	4971	3153	
	3 CH	a	15276	16188	16198	9505	3421	1163	8301	3010	1026	
		b	10006	10605	11449	6332	2275	773	3652	1317	448	
	4 CH	а	4935	4690	5040	1768	504	87	1518	434	77	
		b	3237	3302	3565	1181	336	59	674	192	34	

Table 3A: Survivors ((a) all women, (b) married women) at seleced ages (35, 50, 65) in specified maternal status (specified by the number of surviving children) for chosen family status life tables.

C1 = 1970 - 71 FSL table

C2 = 1990-81 FSL table

C1\* = C1 with female mortality of C2

Cl\*\* = Cl\* with widowhood rates of C2

M1, M2,....= simulated modifications of C2

1 CH.....4 CH = One.....four surviving children

Table 3B:Life expectation at ages 35, 50 and 65 for chosen Family Status Life Tables in states defined by - only maternal status (a)

Age	Surviving			F	amily Sta	tus Life	Table				
	Children (CH)		CI	C1*	C1**	C2	M1	M2	M3	M4	M5
35	1 CH	a	11.01	11.39	11.38	14.51	8.00	9.56	14.89	8.73	10.12
		b	7.55	7.56	7.82	8.94	4,50	5.61	6.37	3.29	4.05
	2 CH	a	14.38	15.17	15.17	15.05	6.49	4,11	13.77	5.99	3, 79
		b	10.49	10.74	11.10	10.47	4.51	2.87	7.10	3.07	1.95
	3 CH	а	7.76	8.30	8.31	4.97	1.75	.60	4,25	1.54	.53
		b	5.73	5.95	6.15	3.45	1.24	.42	2.30	.83	.28
	4 CH	a	2.49	2.59	2.59	.90	.26	.05	.79	.22	.04
		b	1.81	1,82	1.88	.64	.18	.03	.42	.12	.02
0	1 CH	a	7.41	7.83	7.82	9,98	5.50	6,52	10.23	5.99	6.91
		b	4.28	4.33	4.58	5.27	2,68	3.30	3.51	1.86	2.25
	2 CH	a	9.51	10.26	10.26	10,17	4.38	2,77	9.30	4.04	2.55
		b	5.82	6.02	6.37	6.01	2.59	1.64	3.72	1.61	1.02
	3 CH	а	5.12	5.60	5.60	3.27	1.17	.40	2.86	1,03	.35
		b	3.18	3.34	3.53	1.97	.71	.24	1.19	,43	.15
	4 CH	a	1.68	1.78	1.78	.61	.17	.03	.53	.15	.03
		b	1.02	1.03	1.10	.37	.10	.02	.22	.06	.01
5	1 CH	5	4.22	4.62	4.61	5.84	3.20	3.75	5.97	3.48	3.97
		b	1.63	1.68	1.84	2,14	1.08	1.31	1.34	.72	.85
	2 CH	a	5,23	5.87	5,87	5.77	2.47	1.55	5.27	2,28	1.43
		b	2.13	2.25	2,48	2.34	1.00	.63	1.34	. 58	.36
	3 CH	â	2.76	3.14	3.14	1.83	.65	. 22	1.59	.57	.19
		b	1.14	1.22	1.34	.75	.27	.09	.42	.15	.05
	4 CH	5	.95	1.05	1.05	.35	.10	.02	.30	.08	.01
		b	.39	.40	.44	.14	.04	.01	.08	.02	0,00

\_\_\_\_\_

- both maternal and marital status (here only the currently married status) (b)

7 \_\_\_

C1 = 1970-71 FSL table

C2 = 1980-81 FSL table

C1\* = C1 with female mortality of C2

C1\*\* = C1\* with widowhood rates of C2

M1, M2,....= simulated modifications of C2

1 CH.....4 CH = One.....four surviving children

N.B.: Life expectation values are "population based" (see text).

Table 4A: Female survivors in chosen Family Status Life Tables at selected ages by maternal status (specified by the number of surviving children)

a) all women (all marital states)

.....

- b) all women (all marital states) with surviving mother
- c) married women with surviving mother
- d) married women with both parents alive

lge	Survivin	1		Fi	amily Sta	tus Life	Table	
,	Children (CH)		CI	C1*	C1**	C2	MI	M3
;	1 CH	a	26615	26502	26491	31490	17084	32073
		b	23118	23571	23560	28153	15274	28674
		С	21053	21436	21470	23002	11165	19170
		d	15248	15529	16448	17813	8646	14845
	2 CH	a	34976	35498	35501	33594	14541	30766
		b	30381	31571	31574	30033	13000	27506
		с	29261	30405	30457	27972	12061	22808
		d	21193	22027	23334	21661	9340	17662
	3 CH	а	17185	17639	17647	10236	3750	9026
		b	14927	15688	15695	9151	3352	8069
		C	14497	15235	15262	8651	3160	7000
		d	10500	11037	11693	6707	2447	5421
	1 CH	8	23983	23952	23932	30905	17175	31824
		b	13154	14530	14518	19225	10684	19796
		С	11362	12534	12603	14862	7523	10912
		đ	3594	3968	4420	5287	2676	3882
	2 CH	а	32209	32808	32805	32943	14268	30171
		b	17666	19902	19900	20492	8876	18768
		C	16002	18027	18133	17634	7626	12486
		d	5062	5706	6359	6273	2713	4441
	3 CH	a	17808	18395	18406	10861	3926	9488
		b	9767	11159	11165	6756	2442	5902
		C	8902	10170	10233	5878	2120	4108
		d	2816	3219	3589	2091	754	1461
	1 CH	а	21586	22045	22028	28235	15612	28992
		b	1874	2269	2268	3068	1697	3150
		£	1173	1419	1530	1844	939	1194
		d	22	27	32	34	18	22
	2 CH	a	28151	29392	29389	29275	12634	26793
		Ь	2444	3026	3025	3181	1373	2917
		С	1594	1973	2129	2102	906	1247
		d	30	37	45	39	17	23
	3 CH	a	15276	16188	16198	9505	3421	8301
		b	1326	1667	1668	1033	372	902
		с	869	1092	1179	688	247	397
		đ	16	21	25	13	5	7

able 4	<ul> <li>B: Life expension states</li> <li>a) Only by</li> <li>b) By mate</li> <li>c) By mate</li> <li>d) By mate</li> </ul>	ectatic s speci ernal s ernal s ernal s	m at selecte fied as foll mal status status, and a status, as ha status, as ha	d ages, ows: s having ving a s ving bot	for chosen a survivi urviving ø h parents	Family S ng mother other, an alive, an	tatus Lif d as marr d as marr	e Tables, ied ied	
Age	Surviving		u VNY Jay, and also and the late opp and also and the		Family Sta	tus Life	Table		
-	Children <sup>®</sup> (CH)		CI	C1*	£1 <b>**</b>	C2	MI	M3	
35	1 CH	a	11.01	11.39	11.38	14.51	8.00	14.89	
		b	4.00	4.27	4.27	5.57	3.08	5.72	
		C	3.45	3.67	3.71	4.30	2.15	3,24	
		d	1.56	1.62	1.77	2.05	1.02	1.59	
	2 CH	а	14.38	15.17	15.17	15.05	5.49	13.77	
		b	5.32	5.86	5.86	5.95	2.57	5,45	
		C	4.88	5.30	5.36	5.16	2.23	3.75	
		d	2.21	2.35	2.57	2.49	1.07	1.86	
	3 CH	a	7.76	8.30	8.31	4.87	1.75	4.25	
		b	2.92	3.23	3.23	1.94	.70	1.70	
		C	2.67	2.94	2.92	1.71	.62	1.22	
		d	1.20	1.30	1.42	.82	.30	.61	
50	1 CH	а	7.41	7.83	7.82	9.98	5.50	10.23	
		b	1.21	1.38	1.38	1.95	1.03	1.90	
		C	.96	1.09	1.12	1.34	. 58	.93	
	<b>.</b>	đ	.18	.20	.23	.28	. 14	.20	
	2 CH	3	9.51	10.26	10.26	10.17	4.38	9.30	
		b	1.62	1,87	1.87	1.96	.85	1.79	
		5	1.34	1.55	1.59	1.57	. 68	1.03	
	*	d	. 26	.29	.33	. 53	. 14	.22	
	S CH	a L	3.12	3.60	3.60	5.2/	1.1/	Z.85	
		D	.87	1.04	1.04	.64	.25	.36	
		3	"14 ÷*	.8/	.87	.92	.17	, JJ	
		٥	.14	.15	.17	.11	.04	.0/	
65	1 CH	a	4,22	4.62	4.61	5.84	3.20	5.97	
		b	.08	.09	.09	.12	.06	.12	
		C	.04	,05	.06	.07	.03	.04	
		d	0.00	0.00	0.00	0.00	0.00	0.00	
	2 CH	a	5.23	5.87	5.87	5.77	2.47	5.27	
		b	.10	.12	.12	.12	.05	.11	
		C	.06	.07	.08	.08	.03	.04	
		d	0.00	0.00	0.00	0.00	0.00	0.00	
	3 CH	а	2.76	3.14	3.14	1.83	.65	1.59	
		b	.05	.06	.06	.04	.01	.03	
		С	.03	.04	.04	.02	.01	.01	
		d	0.00	0.00	0.00	0.00	0.00	0.00	

7. T

N.B.: Life expectation values are "population based" (see text).

Age	Marital state	C2	N1	N2	N3	N4	N5	Ne
, Jun - Han Ban Alla - Hill -	الله الله عن الله الله الله الله الله الله الله الل	- mar you ay tak tak tak sar ay har tak	. 200 Yes Big has find the pri and par An	n Alte ande gene ander diel kant gene leget and			, har lant ann ann ann an air an air	a till die alle my hee wer ole
15	NM	14.23	7,41	7.41	7.41	7.41	7.41	7.41
	C0	-	.08	.41	.75	1.99	3.75	21.77
	MA	36.50	41.63	41.34	41.04	40,19	38.87	25.50
	特】	8.88	9.98	9.97	9.96	9.64	9.35	6.04
	ÐI	3.66	4.18	4.15	4.12	4,15	3.91	2,55
50	NM	3.25	.24	.24	.24	.24	.24	.25
	CO	-	0.00	0.00	0.00	.99	1.83	11.71
	MA	15.56	17.25	17.26	17.27	16.67	16.18	10.42
	¥I	8.83	9.89	9.89	9,89	9.56	9.27	5.98
	DI	2.23	2.49	2.48	2.47	2.48	2.34	1.51
65	NM	1.85	.13	.13	.13	.13	.13	.13
	C0	-	0.00	0.00	0.00	.57	1.06	6.74
	MA	6.18	6,84	5.84	6.84	6.61	6.41	4.13
	NI	7.90	8.84	8.84	8.85	8.55	8.29	5.35
	DI	1.27	1.39	1.39	1.39	1.39	1.31	.85

# Table 5: Life expectation at selected ages in specified marital states for chosen Family Status Life Tables

C2: FSL table for the 1980-81 situation.

- N1: Rates covering all transitions prior to first possession of the married state from Nego 4; the rest from C2. Mortality as in C2.
- N2: Never-unioned-to-marriage rates and never-unioned-to-cohabitation rates different from N1 (cf. text); the rest as in N1.
- N3: Special cohabitation-to-marriage rates equal to half the corresponding rates in N2; the rest as in N2.
- N4: N2, except for reduced tail of cohabitation-to-marriage schedule (cf. text).
- N5: N4, with cohabitation-to-marriage rates halved.
- N\*: N2, except for absence of transitions from cohabitation to marriage

N.B.: Life expectation values are "population based" (see text).

### FAMILY STATUS LIFE TABLE

FOR

### 1980-81

(C2)

### Contents:

- A1: Number and Percentage of Survivors by Marital and Marker Status
- A2: Number and Percentage of Survivors by Marital, Maternal and Marker Status
- B1: Life Expectation and its Percentage by Marital and Marker Status
- B2: Life Expectation and its Percentage by Marital, Maternal and Marker Status

### A 1 : NUMBER AND PERCENTAGE OF SURVIVORS BY MARITAL AND MARKER STATUS

Table A 1 1 : Marital Status Only

AGE		TOTAL	NE	V. MAR	CUF	L MAR	WII	OWED	DIV	ORCD
o	100000.	100, 00	100000.	100.00	о.	. 00	0.	. 00	0.	. 00
5	98774.	100.00	98774.	100.00	0.	. 00	Ο.	. 00	0.	. 00
10	98652.	100.00	98652.	100, 00	0.	. 00	0.	. 00	<b>O</b> .	. 00
15	98535.	100.00	<b>98535</b> .	100.00	Ο.	. 00	Ο,	. 00	Ο.	. 00
20	98346.	100.00	79451.	80.79	18806.	19. 12	50.	. 05	38,	. 04
25	98092.	100.00	30115.	30.70	66380.	67.67	223.	. 23	1374.	1.40
30	97811.	100.00	17449.	17.84	75779.	77.48	493.	. 50	4091.	4.18
35	97410.	100.00	13805.	14.17	76816.	78.86	846.	. 87	5943.	6.10
40	96835.	100.00	12345.	12.75	75745.	78.22	1473.	1.52	7272.	7.51
45	<b>75773</b> .	100.00	11442.	11. 92	74410.	77. 52	2604.	2.71	7537.	7.85
50	94701.	100.00	10787.	11.39	71845.	75.87	4692.	4.95	7377.	7.79
55	92704.	100.00	10275.	11.08	67420.	72. 73	800 <b>8</b> .	8.64	7001.	7.55
60	89716.	100.00	9773.	10.89	60935.	67.92	12382.	13.80	6625.	7.38
65	85263.	100.00	9202.	10.79	50137.	58.80	19626.	23. 02	6298.	7.39
70	78219.	100.00	8402.	10.74	36437.	46.58	27588.	35. 27	5792.	7.41
75	67514.	100.00	7240.	10.72	22421.	33.21	32846.	48.65	5007.	7.42
80	51442.	100.00	5510.	10.71	10405.	20. 23	31715.	61.65	3812.	7.41

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### Table A 1 2 : Having a Surviving Mother

AGE	T	OTAL	NEV	. MAR	CUR	. MAR	WID	DWED	DIV	ORCD
0	99953.	99.95	99953.	99.95	0.	. 00	Ο.	. 00	0.	. 00
5	98460.	99.68	98460.	99. 68	· 0.	. 00	Ο.	. 00	Ο.	. 00
10	97857.	99.19	97857.	99.19	Ο.	. 00	Ο.	. 00	ο.	. 00
15	97039.	<b>78.48</b>	97039.	<b>98.48</b>	Ο.	. 00	<b>O</b> .	. 00	Ο.	. 00
20	95794.	97.41	77389.	78.69	18318.	18.63	49.	. 05	37.	. 04
25	93917.	95.74	28833.	29.39	63555.	64.79	214.	. 22	1316.	1.34
30	91174.	93. 21	16265.	16.63	70637.	72.22	459.	. 47	3813.	3.90
35	87087.	89.40	12342.	12.67	68675.	70.50	756.	. 78	5313.	5.45
40	80951.	83.60	10320.	10.66	63321.	65. 39	1231.	1.27	6079.	6.28
45	71832.	74.83	8562.	8. 92	55681.	58. 01	1948.	2.03	5640.	5.88
50	58909.	62.21	6710.	7.09	44692.	47.19	2918.	3.08	4589.	4.85
55	42364.	45.70	4695.	5.06	30810.	33, 23	3660.	3.95	3199.	3.45
60	24533.	27.34	2673.	2. 98	16663.	18.57	3386.	3.77	1812.	2. 02
65	9265.	10.87	1000.	1.17	5448.	6.39	2133.	2.50	684.	. 80
70	1292.	1.65	139.	. 18	602.	. 77	456.	. 58	96.	. 12
75	8.	. 01	1.	. 00	Э.	. 00	4.	. 01	1.	. 00
80	<b>O</b> .	. 00	Ο.	. 00	Ο.	. 00	0.	. 00	0.	. 00

## Table A 1 3 : Having No Surviving Mother

AGE		TOTAL	NEV	. MAR	CUR	t. Mar	WII	OWED	DIV	ORCD
0	47.	. 05	47.	. 05	0.	. 00	<b>O</b> .	. 00	<b>O</b> .	. 00
5	313.	. 32	313.	. 32	<b>O</b> .	. 00	<b>O</b> .	. 00	ο.	. 00
10	794.	. 81	794.	. 81	ο.	. 00	Ο.	. 00	Ο.	. 00
15	1497.	1. 52	1497.	1.52	Ο.	. 00	Ο.	. 00	0.	. 00
20	2552.	2. 59	2061.	2.10	488.	. 50	1.	. 00	1.	. 00
25	4175.	4.26	1282.	1.31	2825.	2.88	10.	. 01	58.	. 06
30	6637.	6.79	1184.	1.21	5142.	5.26	33.	. 03	278.	. 28
35	10323.	10.60	1463.	1.50	8141.	8.36	90.	. 09	630.	. 65
40	15884.	16.40	2025.	2.09	12424.	12. 83	242.	. 25	1193.	1.23
45	24161.	25.17	2880.	3, 00	18729.	19. 51	655.	. 68	1897.	1. 98
50	35792.	37.79	4077.	4. 30	27154.	28.67	1773.	1.87	2788.	2. 94
55	50340.	54.30	5579.	6. 02	36610.	39.49	4349.	4.69	3801.	4.10
60	65183.	72.66	7101.	7.91	44273.	49. 35	8996.	10.03	4814.	5.37
65	75998.	87.13	8202.	9.62	44689.	52.41	17493.	20. 52	5613.	6. 58
70	76927.	98.35	8263.	10.56	35835.	45. 81	27132.	34. 69	5697.	7. 28
75	67506.	99. 99	7239.	10.72	22419.	33. 21	32842.	48, 65	5006.	7.42
80	51442.	100. 00	5510.	10.71	10405.	20. 23	31715.	61.65	3812.	7.41

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### A 2 : NUMBER AND PERCENTAGE OF SURVIVORS BY MARITAL, MATERNAL AND MARKER STATUS

Table A 2 1 1 : All Marital States Together

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
ō	100000.	100.00	100000.	100.00	0.	. 00	Ο.	. 00	<b>O</b> .	. 00	Ο.	. 00	Ο.	. 00
5	98774.	100.00	98774.	100.00	Ο.	. 00	Ο.	. 00	<b>O</b> .	. 00	Ο.	. 00	<b>O</b> .	. 00
10	98652.	100.00	<b>78652</b> .	100.00	Ο.	. 00	0.	. 00	<b>O</b> .	. 00	<b>O</b> .	. 00	Ο.	. 00
15	98535.	100.00	98 <b>5</b> 35.	100.00	<b>O</b> ,	. 00	ο.	. 00	<b>O</b> .	. 00	<b>O</b> .	. 00	<b>Q</b> .	. 00
20	98346.	100.00	89766.	<b>71.28</b>	8003.	8.14	556.	. 57	20.	. 02	<b>O</b> .	. 00	Ο.	. 00
25	98092.	100.00	51564.	52. 57	33365.	34.01	11626.	11.85	1353.	1.38	158.	. 16	26.	. 03
30	97811.	100.00	26301.	26.89	34438.	35. 21	29487.	30.15	6310.	6.45	929.	. 95	347.	. 35
35	97410.	100.00	19378.	19.89	31490.	32. 33	33594.	34. 49	10236.	10. 51	1793.	1.84	<b>717</b> .	. 94
40	96835.	100.00	17390.	17.96	31264.	32. 29	<b>33743</b> .	34.85	11094.	11.46	2016.	2.08	1329.	1.37
45	95993.	100.00	16864.	17, 57	31180.	32.48	33446.	34.84	11059.	11. 52	2004.	2.07	1439.	1.50
50	94701.	100.00	16602.	17. 53	30905.	32. 63	32943.	34. 79	10861.	11.47	1974.	2.08	1417.	1.50
55	92704.	100.00	16335.	17.62	30356.	32.75	32153.	34. 68	10562.	11.39	1930.	2.08	1368.	1.48
60	89716.	100.00	15920.	17.74	29515.	32.90	30988.	34. 54	10131.	11.29	1865.	2.08	1298.	1.45
65	85263.	100. 00	15281.	17. 92	28235.	33. 11	29275.	34. 33	9505.	11.15	1768.	2.07	1199.	1.41
70	78219.	100.00	14226.	18.19	26152.	33. 43	26617.	34. 03	8556.	10. 94	1614.	2.06	1055.	1.35
75	67514.	100.00	12564.	18.61	22903.	33. 92	22646.	33. 54	7168.	10.62	1380.	2.04	853.	1.26
80	51442.	100.00	<b>9</b> 918.	19.28	17820.	34. 64	16868.	32. 79	5217.	10. 14	1031.	2.00	588.	1.14

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### Table A 2 1 2 : All Marital States, Having a Surviving Mother

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	99953.	99.95	99953.	99.95	<b>O</b> .	. 00	Ο.	. 00	<b>O</b> .	. 00	Ο.	. 00	Ο.	. 00
5	98460.	99.68	<b>7846</b> 0.	99. 68	Ο.	. 00	Ο,	. 00						
10	97857.	<b>77</b> . 19	97857.	99.19	0.	. 00	<b>O</b> .	. 00	<b>O</b> .	. 00	Ο.	. 00	Ο.	. 00
15	97039.	<b>98. 48</b>	970 <b>39</b> .	<b>78.48</b>	Ο.	. 00	0.	. 00	Ο.	. 00	О.	. 00	Ο.	. 00
20	95794.	97.41	87437.	88. 91	7795.	7.93	542.	. 55	20.	. 02	Ο.	. 00	Ο.	. 00
25	93917.	95.74	49369.	50. 33	31945.	32. 57	11132.	11.35	1296.	1.32	151.	. 15	25.	. 03
30	91174.	93. 21	24516.	25.06	32101.	32.82	27486.	28. 10	5882.	6. 01	866.	. 89	323.	. 33
35	87087.	89.40	17324.	17.78	28153.	28. 90	30033.	30. 83	9151.	9.39	1603.	1.65	822.	. 84
40	80951.	83. 60	14538.	15.01	26136.	26. 99	28208.	29. 13	9274.	9.58	1686.	1.74	1111.	1.15
45	71832.	74.83	12620.	13.15	23332.	24. 31	25027.	26. 07	8276.	8. 62	1500.	1.56	1077.	1, 12
50	58909.	62. 21	10327.	10.91	19225.	20.30	20492.	21.64	6756.	7.13	1228.	1.30	882.	. 93
55	42364.	45.70	7465.	8.05	13872.	14. 96	14693.	15.85	4827.	5.21	882.	. 95	625.	. 67
60	24533.	27.34	4353.	4.85	8071.	9.00	8474.	9.44	2770.	3.09	510.	. 57	355.	. 40
65	9265.	10.87	1661.	1.95	3068.	3.60	3181.	3.73	1033.	1.21	192.	. 23	130.	. 15
70	1292.	1.65	235.	. 30	432.	. 55	440.	. 56	141.	. 18	27.	. 03	17.	. 02
75	8.	. 01	1.	. 00	З.	00	Э.	. 00	1.	. 00	<b>O</b> .	. 00	Ο.	. 00
80	Ο.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00	Ο.	. 00	<b>O</b> .	. 00	<b>O</b> .	. 00

Table A 2 1 3 : All Marital States, Having No Surviving Mother

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	47.	. 05	47.	. 05	Ο.	. 00	Ο.	. 00	0.	. 00	0.	. 00	ο.	. 00
5	313.	. 32	313.	. 32	Ο.	. 00	Ο.	. 00	<b>O</b> .	. 00	Ο.	. 00	Ο.	. 00
10	794.	. 81	794.	. 81	0.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
15	1497.	1.52	1497.	1.52	Ο.	. 00	Ο.	. 00	Ο.	. 00	<b>O</b> .	. 00	Ο.	. 00
20	2552.	2. 59	2329.	2.37	208.	. 21	14.	. 01	1.	. 00	Ο.	. 00	Ο.	. 00
25	4175.	4.26	2195.	2.24	1420.	1.45	495.	. 50	58.	. 06	7.	. 01	1.	. 00
30	6637.	6.79	1785.	1, 82	2337.	2.39	2001.	2.05	428.	. 44	63.	. 06	24.	. 02
35	10323.	10, 60	2054.	2.11	3337.	3.43	3560.	3.65	1085.	1.11	190.	. 20	97.	. 10
40	15884.	16.40	2852.	2, 95	5128.	5.30	5535.	5.72	1820.	1.88	331.	. 34	218.	. 23
45	24161.	25.17	4245.	4.42	7848.	8. 18	8418.	8.77	2784.	2.90	504.	. 53	362.	. 38
50	35792.	37.79	6275.	6.63	11680.	12.33	12451.	13.15	4105.	4.33	746.	. 79	536.	. 57
55	50340.	54.30	8870.	9.57	16484.	17.78	17459.	18.83	5736.	6.19	1048.	1.13	743.	. 80
60	65183.	72.66	11567.	12.89	21444.	23, 90	22514.	25.10	7360.	8.20	1355.	1.51	943.	1.05
65	75998.	89.13	13620.	15.97	25166.	29. 52	26094.	30, 60	8473.	9. 94	1576.	1.85	1069.	1.25
70	76927.	98.35	13991.	17.89	25720.	32.88	26177.	33. 47	8414.	10.76	1587.	2.03	1038.	1.33
75	67506.	<b>77. 7</b> 7	12562.	18.61	22900.	33, 92	22644.	33. 54	7167.	10, 62	1380.	2.04	853.	1.26
80	51442.	100.00	9918.	19, 28	17820.	34.64	16868.	32. 79	5217.	10.14	1031.	2.00	588.	1.14

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### Table A 2 2 1 : Never-Married : All

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD~2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	100000.	100.00	100000.	100.00	Ο.	. 00	<b>Q</b> .	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
5	98774.	100.00	98774.	100, 00	<b>O</b> .	. 00	Ο.	. 00	0.	. 00	Ο.	. 00	Ο.	. 00
10	<b>78652</b> .	100.00	<b>98652</b> .	100.00	Ο.	. 00	ο.	. 00	Ο.	. 00	Ο.	. 00	0.	. 00
15	98535.	100.00	98535.	100.00	0.	. 00	0.	. 00	Ο.	. 00	Ο.	. 00	ο.	. 00
20	79451.	80. 79	78317.	79. 63	1134.	1.15	Ο,	. 00	0.	. 00	· 0.	. 00	Ο.	. 00
25	30115.	30.70	28111.	28.66	2004.	2.04	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
30	17449.	17.84	14754.	15.08	2695.	2.76	Ο.	. 00	Ο,	. 00	Ο.	. 00	Ο.	. 00
35	13805.	14.17	10790.	11,08	3015.	Э. 10	ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
40	12345.	12.75	9311.	9.61	3034.	3.13	<b>O</b> .	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
45	11442.	11.92	8557.	8.91	2884.	3.00	<b>O</b> .	. 00	Ο.	. 00	<b>O</b> .	. 00	Ο.	. 00
50	10787.	11.37	8067.	8. 52	2720.	2.87	Ο.	. 00	0.	. 00	0.	. 00	Ο.	. 00
55	10275.	11.08	7691.	8.30	2584.	2.79	Ο.	. 00	0.	. 00	Ο.	. 00	Ο.	00
60	9773.	10, 89	7324.	8.16	2449.	2.73	Ο.	. 00	Ο.	. 00	<b>O</b> .	. 00	Ο.	. 00
65	9202.	10.79	6907.	8.10	2295.	2.69	Ο.	. 00	Ο.	. 00	Ο.	. 00	o.	. 00
70	8402.	10.74	6322.	8.08	2080.	2.66	Ο.	. 00	Ο.	. 00	Ο.	. 00	0.	. 00
75	7240.	10. 72	5467.	8.10	1772.	2.62	0.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
80	5510.	10.71	4185.	8.14	1326.	2. 58	Ο,	, 00	0.	. 00	0.	. 00	0.	. 00

Table	e A 2 2	22:Ne	ever-Ma	rried;	Having	a Survi	ving Mo	other						
AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	99953.	<b>79</b> 9.95	99953.	99.95	Ο.	. 00	Ο.	. 00	· 0.	. 00	Ο.	. 00	Ο.	. 00
5	98460.	99:68	98460.	<b>99. 68</b>	<b>O</b> .	. 00	<b>O</b> .	. 00	Ο.	. 00	Ο.	. 00	. 0.	. 00
10	97857.	99.19	97857.	99.19	Ο.	. 00	Ο.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00
15	97039.	<b>98.48</b>	97039:	<b>98.48</b>	0.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
20	77389.	78.69	76284.	77.57	1105.	1.12	Ο.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00
25	28833.	29.39	26914.	27.44	1717.	1.96	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
30	16265.	16.63	13753.	14.06	2512.	2. 57	Ο.	. 00	Ο.	. 00	Ο.	. 00	<b>O</b> .	. 00
35	12342.	12.67	9646.	9.90	2695.	2.77	Ο.	. 00	<b>O</b> .	. 00	Ο.	. 00	Ο.	. 00
40	10320.	10.66	7783.	8.04	2537.	2.62	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
45	8562.	8.92	6404.	6.67	2158.	2. 25	Ο.	. 00	· O.	. 00	Ο.	. 00	Ο.	. 00
50	6710.	7.09	5018.	5.30	1692.	1.79	<b>O</b> .	. 00	· O.	. 00	0.	. 00	Ο.	. 00
55	4695.	5.06	3515.	3.79	1181.	1.27	О.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
60	2673.	2. 98	2003.	2, 23	670.	. 75	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
65	1000.	1.17	751.	. 88	249.	. 29	<b>O</b> .	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
70	139.	. 18	104.	. 13	34.	. 04	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
75	1.	. 00	1.	. 00	<b>O</b> .	. 00	Ο.	. 00	Ο.	. 00	0.	. 00	ο.	. 00
80	Ο.	. 00	0.	. 00	Ο.	. 00	0.	. 00	<b>O</b> .	. 00	Ο.	. 00	0.	. 00

## Table A 2 2 3 : Never Married; Having No Surviving Mother

AGE	TOTAL	PERCENT	CHILD-O	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	47.	. 05	47.	. 05	<b>O</b> .	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
5	313.	. 32	313.	. 32	Ο.	. 00	0.	. 00	Ο.	. 00	0.	. 00	0.	. 00
10	794.	. 81	794.	. 81	Ο.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00	Ο.	. 00
15	1497.	1.52	1497.	1.52	Ο.	. 00	0.	· . 00	<b>O</b> .	. 00	Ο.	. 00	<b>O</b> .	. 00
20	2061.	2.10	2032.	2.07	29.	. 03	Ο.	. 00	Ο.	. 00	Ο.	. 00	0.	. 00
25	1282.	1, 31	1196.	1.22	85.	. 09	ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
30	1184.	1.21	1001.	1.02	183.	. 19	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
35	1463.	1.50	1143.	1.17	320.	. 33	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
40	2025.	2.09	1527.	1.58	498.	. 51	О.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00
45	2880.	3.00	2154.	2. 24	726.	. 76	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
50	4077.	4.30	3049.	3. 22	1028.	1.09	Ο,	. 00	Ο.	. 00	0.	. 00	Ο.	. 00
55	5579.	6. 02	4176.	4. 50	1403.	1.51	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
60	7101.	7.91	5321.	5. 93	1780.	1. 78	Ο.	. 00	<b>O</b> .	. 00	Ο.	. 00	Ο.	. 00
65	8202.	9.62	6157.	7.22	2045.	2.40	Ο.	. 00	Ο.	. 00	Ο.	. 00	· O.	. 00
70	8263.	10.56	6218.	7.95	2046.	2.62	ο.	. 00	Ο.	. 00	Ο.	. 00	<b>O</b> .	. 00
75	7239.	10.72	5467.	8.10	1772.	2.62	Ο.	. 00	Ο.	. 00	0.	. 00	0.	. 00
80	5510.	10.71	4185.	8.14	1326.	2. 58	0.	. 00	Ο,	. 00	<b>O</b> .	. 00	<b>O</b> .	. 00

Table A 2 3 1 : Currently Married : All

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	Ο,	. 00	<b>O</b> .	. 00	0.	. 00	<b>O</b> .	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
5	<b>O</b> .	. 00	Ο.	. 00	<b>Q</b> .	. 00	Ο.	. 00	Ο.	. 00	<b>O</b> .	. 00	0.	. 00
10	Ο.	. 00	0.	. 00	ο.	. 00	<b>O</b> .	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
15	Ο.	. 00	0.	. 00	Ο.	. 00	<b>O</b> .	. 00	<b>O</b> .	. 00	Ο.	. 00	Ο.	. 00
20	18806.	19.12	11386.	11.58	6845.	6. 96	554.	. 56	20.	. 02	ο.	. 00	Ο.	. 00
25	66380.	67.67	22744.	23.19	30683.	31.28	11438.	11.66	1333.	1.36	156.	. 16	26.	. 03
30	75779.	77.48	10467.	10.70	29688.	30.35	28278.	28. 91	6107.	6. 24	901.	. 92	338.	. 35
35	76816.	78.86	7523.	7.72	25729.	26.41	31288.	32.12	9688.	9.95	1706.	1.75	882.	. 91
40	75745.	78. 22	6960.	7.19	24922.	25.74	30543.	31.54	10206.	10.54	1864.	1. 93	1249.	1.29
45	74410.	77. 52	7116.	7.41	24599.	25. 63	29636.	30. 87	9932.	10.35	1806.	1.88	1322.	1.38
50	71845.	75.87	7177.	7.58	23892.	25. 23	28347.	29. 93	9449.	9. 98	1722.	1.82	1257.	1.33
55	67420.	72. 73	6991.	7.54	22518.	24.29	26399.	28.48	8756.	9.44	1604.	1.73	1153.	1.24
60	60935.	67.92	6508.	7.25	20468.	22. 81	23690.	26.41	7812.	8.71	1442.	1.61	1016.	1.13
65	50137.	58.80	5499.	6.45	16971.	19.90	19343.	22.69	6332.	7.43	1181.	1.38	811.	. 95
70	36437.	46. 58	4120.	5. 27	12473.	15.95	13918.	17.79	4509.	5.76	853.	1.09	564.	. 72
75	22421.	33. 21	2640.	3.91	7807.	11.56	8439.	12.50	2691.	3.99	520.	. 77	325.	. 48
80	10405.	20. 23	1300.	2.53	3713.	7.22	3827.	7.44	1192.	2. 32	237.	. 46	136.	. 26

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## Table A 2 3 2 : Currently Married; Having a Surviving Mother

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	Ο.	. 00	0.	, 00	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
5	<b>O</b> .	. 00	Ο.	. 00	<b>O</b> .	. 00	Ο.	. 00						
10	Ο.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00	Ο.	. 00	<b>O</b> .	. 00	Ο.	. 00
15	Ο.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00	Ο.	. 00	Ο,	. 00	0.	. 00
20	18318.	18.63	11091.	11.28	6667.	6, 78	540.	. 55	20.	. 02	Ο.	. 00	0.	. 00
25	63555.	64.79	21776.	22, 20	29377.	29.95	10951.	11.16	1277.	1,30	149.	. 15	25.	. 03
30	70637.	72.22	9757.	9.97	27674.	28. 29	26359.	26. 95	5693.	5.82	840.	. 86	315.	. 32
35	68675.	70.50	6725.	6. 90	23002.	23. 61	27972.	28.72	8661.	8, 89	1525.	1.57	789.	. 81
40	63321.	65. 39	5818.	6.01	20834.	21.52	25533.	26. 37	8532.	8.81	1559.	1.61	1044.	1.08
45	55681.	58.01	5325.	5. 55	18407.	19.18	22177.	23.10	7432.	7.74	1351.	1.41	989.	1.03
50	44692.	47.19	4464.	4.71	14862.	15.69	17634.	18.62	5878.	6. 21	1071.	1.13	782.	. 83
55	30810.	33, 23	3195.	3.45	10290.	11.10	12064.	13.01	4001.	4.32	733.	. 79	527.	. 57
60	16663.	18. 57	1780.	1.98	5597.	6.24	6478.	7.22	2136.	2. 38	394.	. 44	278.	. 31
65	5448.	6.39	598.	. 70	1844.	2.16	2102.	2.47	688.	. 81	128.	. 15	88.	. 10
70	602.	. 77	68.	. 09	206.	. 26	230.	. 29	74.	. 10	14.	. 02	9.	. 01
75	Э.	. 00	0.	. 00	1.	. 00	1.	. 00	0.	. 00	0.	. 00	Ο.	. 00
80	Ο.	. 00	О.	. 00	ο.	. 00	Ο.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
ο	<b>Q</b> .	<u>`</u> . oo	Ο.	. 00	0.	. 00	<b>Q</b> .	. 00	Ο.	. 00	Ο,	. 00	<b>O</b> .	. 00
5	<b>Q</b> .	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00	<b>O</b> .	. 00
10	<b>Q</b> .	. 00	Ο.	. 00	Ο.	. 00	0.	. 00	<b>O</b> .	. 00	Ο.	. 00	<b>O</b> .	. 00
15	0.	. 00	Ο.	. 00	ο.	. 00	Ο.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00
20	488.	. 50	295.	. 30	178.	. 18	14.	. 01	1.	. 00	Ο.	. 00	Ο.	. 00
25	2825.	2.88	968.	. 99	1306.	1.33	487.	. 50	57.	. 06	7.	. 01	1.	. 00
30	5142.	5.26	710.	. 73	2014.	2.06	1919.	1.96	414.	. 42	61.	. 06	23.	. 02
35	8141.	8.36	797.	. 82	2727.	2.80	3316.	3.40	1027.	1.05	181.	. 19	93.	. 10
40	12424.	12.83	1142.	1.18	4088.	4. 22	5010.	5.17	1674.	1.73	306.	. 32	205.	. 21
45	18729.	19.51	1791.	1,87	6191.	6.45	7459.	7.77	2500.	2.60	455.	. 47	333.	. 35
50	27154.	28, 67	2713.	2.86	9030.	9.54	10714.	11.31	3571.	3.77	651.	. 69	475.	. 50
55	36610.	39.49	3796.	4.09	12228.	13.19	14335.	15.46	4754.	5.13	871.	. 94	626.	. 68
60	44273.	49.35	4728.	5.27	14871.	16, 58	17212.	19. 18	5676.	6. 33	1047.	1.17	738.	. 82
65	44689.	52.41	4902.	5.75	15127.	17.74	17241.	20. 22	5644.	6.62	1052.	1.23	723.	. 85
70	35835.	45.81	4052.	5. 18	12267.	15.68	13688.	17.50	4434.	5.67	839.	1.07	555.	. 71
75	22419.	33, 21	2639.	3.91	7806.	11.56	8438.	12. 50	2691.	3.99	520.	. 77	325.	. 48
80	10405.	20. 23	1300.	2, 53	3713.	7.22	3827.	7.44	1192.	2.32	237.	. 46	136.	. 26

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Table A 2 3 3 : Currently Married; Having No Surviving Mother

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page	
48	

## Table A 2 4 1 : Widowed : All

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00	0.	. 00
5	<b>O</b> .	. 00	О,	. 00	Ο.	. 00	<b>O</b> .	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
10	Ο.	. 00	<b>O</b> .	, 00	<b>O</b> .	. 00	Ο.	. 00	0.	. 00	<b>O</b> .	. 00	Ο.	. 00
15	Ο,	. 00	<b>Q</b> .	. 00	Ο.	. 00	0.	. 00	Ο.	. 00	<b>O</b> .	. 00	Ο.	. 00
20	50.	. 05	36.	. 04	13.	. 01	1.	. 00	Ο,	. 00	ο.	. 00	Ο.	. 00
25	223.	. 23	114.	. 12	88.	. 07	19.	. 02	2.	. 00	Ο.	. 00	Ο.	. 00
30	493.	. 50	143.	. 15	219.	. 22	109.	. 11	18.	. 02	2.	. 00	1.	. 00
35	846.	. 87	157.	. 16	346.	. 36	266.	. 27	63.	. 06	10.	. 01	4.	. 00
40	1473.	1.52	202.	. 21	553.	. 57	527.	. 54	150.	. 16	26.	. 03	14.	. 01
45	2604.	2.71	304.	. 32	924.	, 96	983.	1.02	304.	. 32	54.	. 06	34.	. 04
50	4692.	4. 95	509.	. 54	1618.	1.71	1809.	1.91	580.	. 61	105.	. 11	71.	. 08
55	8008.	8.64	851.	. 92	2729.	2. 94	3106.	3.35	1010.	1.09	184.	. 20	128.	. 14
60	12382.	13.80	1324.	1.48	4210.	4.69	4797.	5.35	1564.	1.74	288.	. 32	199.	. 22
65	19626.	23.02	2137.	2.51	6691.	7.85	7567.	8.87	2461.	2.89	458.	. 54	311.	. 36
70	27588.	35. 27	3090.	3.95	94 <b>8</b> 8.	12.13	10543.	13.48	3402.	4.35	643.	. 82	422.	. 54
75	32846.	48. 65	3833.	5.68	11474.	16.99	12372.	18. 33	3935.	5.83	759.	1.12	472.	. 70
80	31715.	61.65	3929.	7.64	11344.	22.05	11678.	22.70	3631.	7.06	720,	1,40	413.	. 80

Table A 2 4 2 : Widowed; Having a Surviving Mother

4.55	TOTAL	DEDOENT	CH11 D-0	DEDACHT		DEDCENT	CHTI 0-2	PERCENT	CHTLD-3	PERCENT	CHTI D-4	PERCENT	CHU D-5	PERCENT
AGE	IUTAL	PERCENT	CHILD-0	FERGENI	CHILD-1	FERGEN	CHILD-E	- CRUCERT		00	0	00	0	
0	Ο.	. 00	Ο.	. 00	0.	. 00	υ.	. 00	0.	. 00	0.	. 00	0.	. 00
5	0.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00	0.	. 00
10	Ο.	. 00	Ο.	. 00	Ο.	. 00	0.	. 00	0.	. 00	0.	. 00	0.	. 00
15	ο.	. 00	0.	. 00	0.	. 00	0.	. 00	ο.	. 00	Ο.	. 00	Ο.	. 00
20	49.	. 05	35.	. 04	13.	. 01	1.	. 00	Ο.	. 00	0.	. 00	0.	. 00
25	214	. 22	107.	. 11	84.	. 09	19.	. 02	2.	. 00	Ο.	. 00	Ο.	. 00
30	459.	. 47	133.	. 14	204.	. 21	102.	. 10	16.	. 02	2.	. 00	1.	. 00
35	756.	. 78	140.	. 14	310.	. 32	238.	. 24	56.	. 06	9.	. 01	4.	. 00
40	1231.	1.27	169.	. 17	462.	. 48	441.	. 46	126.	. 13	22.	. 02	12.	. 01
45	1948.	2.03	227.	. 24	692.	. 72	735.	. 77	228.	. 24	41.	. 04	26.	. 03
50	2918.	3.08	317.	. 33	1006.	1.06	1125.	1.19	361.	. 38	65.	. 07	44.	. 05
55	3660.	3.95	389.	. 42	1247.	1.35	1420.	1.53	462.	. 50	84.	. 09	58.	. 06
60	3386.	3.77	362.	. 40	1151.	1,28	1312,	1.46	428.	. 48	79.	. 09	54.	. 06
65	2133.	2.50	232.	. 27	727.	. 85	822.	. 96	267.	. 31	50.	. 06	34.	. 04
70	456.	. 58	51.	. 07	157.	. 20	174.	. 22	56.	. 07	11.	. 01	7.	. 01
75	4.	. 01	Ο.	. 00	1.	. 00	1.	. 00	Ο.	. 00	<b>O</b> .	. 00	Ö.	. 00
80	Ο.	. 00	Ο.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00	0.	. 00	0.	. 00

2

## Table A 2 4 3 : Widowed; Having No Surviving Mother

AGE	TOTAL	PERCENT	CHILD-O	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	0.	. 00	Ο.	. 00	0.	. 00	0.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00
5	ο.	. 00	Ο.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00	Ο.	. 00	<b>O</b> .	. 00
10	0.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00	0.	. 00	0.	. 00	Ο.	. 00
15	ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00	0.	. 00	0.	. 00	Ο.	. 00
20	1.	. 00	1.	. 00	Ο.	. 00	Ο.	. 00	Ο,	. 00	Ο.	. 00	Ο.	. 00
25	10.	. 01	5.	. 00	4.	. 00	1.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
30	33.	. 03	10.	. 01	15.	. 02	7.	. 01	1.	. 00	0.	. 00	Ο.	. 00
35	<b>90</b> ,	. 09	17.	. 02	37.	. 04	28.	. 03	7.	. 01	1.	. 00	Ο.	. 00
40	242.	. 25	33.	. 03	91.	. 09	86.	. 09	25.	. 03	4.	. 00	2.	. 00
45	655.	. 68	76.	. 08	233.	. 24	247.	. 26	77.	. 08	14.	. 01	9.	. 01
50	1773.	1.87	192.	. 20	611.	. 65	684.	. 72	219.	. 23	40.	. 04	27.	. 03
55	4349.	4.69	462.	. 50	1482.	1.60	1687.	1.82	548.	. 59	100.	. 11	69.	. 07
60	8996.	10.03	962.	1.07	3059.	3.41	3486.	3.87	1136.	1.27	209.	. 23	144.	. 16
65	17493.	20. 52	1905.	2. 23	5964.	6.99	6745.	7.91	2194.	2. 57	408.	. 48	277.	. 33
70	27132.	34.69	3037.	3.89	9331.	11.93	10369.	13. 26	3346.	4. 28	632.	. 81	415.	. 53
75	32842.	48.65	3833.	5.68	11472.	16. 99	12371.	18. 32	3935.	5.83	759.	1.12	472.	. 70
80	31715.	61.65	3729.	7.64	11344.	22. 05	11678.	22. 70	3631.	7.06	720.	1.40	413.	. 80

Table A 2 5 1 : Divorced : All

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	Ο.	<u>`</u> . 00	Ο.	. 00	ο.	. 00	0.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00
5	<b>O</b> .	. 00	Ο.	. 00	0.	. 00	Ο.	. 00	Ο.	. 00	<b>O</b> .	. 00	<b>O</b> .	. 00
10	Ο.	. 00	0.	. 00	0.	. 00	0.	. 00	<b>O</b> .	. 00	<b>O</b> .	. 00	Ο.	. 00
15	Ο.	. 00	ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00	0.	. 00
20	38.	. 04	27.	. 03	11.	. 01	1.	. 00	Ο.	. 00	Ο.	. 00	ο.	. 00
25	1374.	1.40	595.	. 61	590.	. 60	169.	. 17	18.	. 02	2.	. 00	Ο.	. 00
30	4091.	4.18	937.	. 96	1836.	1.88	1100.	1, 12	185.	. 19	25.	. 03	8.	. 01
35	5943.	6.10	908.	. 93	2400.	2.46	2040.	2.09	485.	. 50	77.	. 08	33.	. 03
40	7272.	7.51	<b>917</b> .	. 95	2755.	2.84	2672.	2.76	737.	. 76	126.	. 13	65.	. 07
45	7537.	7.85	887.	. 92	2773.	2.89	2827.	2.95	823.	. 86	144.	. 15	83.	. 09
50	7377.	7.79	849.	. 90	2676.	2.83	2787.	2. 94	831.	. 88	147.	. 15	88.	. 07
55	7001.	7.55	802.	. 87	2525.	2.72	2648.	2.86	797.	. 86	142.	. 15	87.	. 09
60	6625.	7.38	764.	. 85	2388.	2.66	2501.	2.79	755.	. 84	135.	. 15	83.	. 09
65	6298.	7.39	737.	. 86	2277.	2.67	2365.	2.77	712.	. 84	129.	. 15	78.	. 07
70	5792.	7.41	694.	. 87	2111.	2.70	2156.	2.76	645.	. 82	118.	. 15	69.	. 07
75	5007.	7.42	624.	, 92	1850.	2.74	1835.	2. 72	541.	. 80	101.	. 15	56.	. 08
80	3812.	7.41	504.	. 78	1438.	2.79	1363.	2.65	393.	. 76	75.	. 15	39.	. 07

ъ.

## Table A 2 5 2 : Divorced; Having a Surviving Mother

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD~2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	Ο.	. 00	Ο.	. 00	Ο.	. 00	ο.	. 00	Ο.	. 00	0.	. 00	<b>O</b> .	. 00
5	Ο.	. 00	Ο.	. 00	О.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00
10	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00	<b>O</b> .	. 00
15	Ο.	. 00	Ο.	. 00	Ο,	. 00	Ο.	. 00	0.	. 00	<b>O</b> .	. 00	Ο,	. 00
20	37.	. 04	26.	. 03	10.	. 01	1.	. 00	Ο.	. 00	0.	. 00	Ο.	. 00
25	1316.	1.34	570.	. 58	565.	. 58	162.	. 16	17.	. 02	2.	. 00	Ο.	. 00
30	3813.	3.90	873.	. 89	1711.	1.75	1025.	1.05	173.	. 18	24.	. 02	7.	. 01
35	5313.	5.45	812.	. 83	2145.	2. 20	1824.	1.87	434.	. 45	69.	. 07	29.	. 03
40	6079.	6. 28	767.	. 79	2303.	2.38	2234.	2. 31	616.	. 64	105.	. 11	54.	. 06
45	5640.	5. 88	664.	. 69	2075.	2.16	2116.	2, 20	616.	. 64	108.	. 11	62.	. 06
50	4589.	4.85	528.	. 56	1664.	1.76	1734.	1.83	517.	. 55	91.	. 10	55.	. 06
55	3199.	3.45	367.	. 40	1154.	1.24	1210.	1.31	364.	. 39	65.	. 07	40.	. 04
60	1812.	2. 02	209.	. 23	653.	. 73	684.	. 76	206.	. 23	37.	. 04	23.	. 03
65	684.	. 80	80.	. 09	247.	. 29	257.	. 30	77.	. 07	14.	. 02	8.	. 01
70	96.	. 12	11.	. 01	35.	. 04	36.	. 05	11.	. 01	2.	. 00	1.	. 00
75	1.	. 00	0.	. 00	0.	. 00	0.	. 00	0.	. 00	Ο.	. 00	Ο.	. 00
80	Ο.	. 00	Ο.	. 00	Ο.	. 00	Ο.	. 00	<b>O</b> .	. 00	0.	. 00	Ο.	. 00

Table A 2 5 3 : Divorced; Having No Surviving Mother

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	Q.	° . 00	Ο.	. 00	Ο.	. 00	0.	. 00	<b>O</b> .	. 00	<b>O</b> .	. 00	Ο.	. 00
5	<b>Q</b> .	. 00	Ο.	. 00	<b>O</b> .	. 00	Ο.	. 00	<b>Q</b> .	. 00	<b>O</b> .	. 00	Ο.	. 00
10	<b>Q</b> .	. 00	Ο.	. 00	Ο,	. 00	0.	. 00	<b>Q</b> .	. 00	Ο.	. 00	<b>O</b> .	. 00
15	<b>O</b> .	. 00	Ο.	. 00	0.	. 00	· 0.	. 00	Ο.	. 00	<b>O</b> .	. 00	<b>O</b> .	. 00
20	1.	. 00	1.	. 00	0.	. 00	<b>O</b> .	. 00	<b>O</b> .	. 00	Ο.	. 00	0.	. 00
25	58.	. 06	25.	. 03	25.	. 03	7.	. 01	1.	. 00	Ο.	. 00	0.	. 00
30	278.	. 28	64.	. 06	125.	. 13	75.	. 08	13.	. 01	2.	. 00	1,	. 00
35	630.	. 65	96.	. 10	254.	. 26	216.	. 22	51.	. 05	8.	. 01	З,	. 00
40	1193.	1.23	150.	. 16	452.	. 47	438.	. 45	121.	. 12	21.	. 02	11.	. 01
45	1897.	1.98	223.	. 23	698.	. 73	712.	. 74	207.	. 22	36.	. 04	21,	. 02
50	2788.	2.94	321.	. 34	1011.	1.07	1053.	1.11	314.	. 33	55.	. 06	33.	. 04
55	3801.	4.10	436.	. 47	1371.	1.48	1438.	1.55	433.	. 47	77.	. 08	47.	. 05
60	4814.	5.37	555.	. 62	1735.	1.93	1817.	2.03	548.	. 61	<b>78</b> .	. 11	60.	. 07
65	5613.	6. 58	656.	. 77	2030.	2.38	2108.	2.47	635.	. 74	115.	. 13	67.	. 08
70	5697.	7.28	682.	. 87	2076.	2.65	2120.	2.71	634.	. 81	116.	. 15	68.	. 07
75	5006.	7.42	623.	. 92	1850.	2.74	1835.	2.72	541.	. 80	101.	. 15	56.	. 08
80	3812.	7.41	504.	. 78	1438.	2.79	1363.	2.65	373.	. 76	75.	. 15	37.	. 07

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### B 1 : LIFE EXPECTATION AND ITS PERCENTAGE BY MARITAL AND MARKER STATUS

Table B 1 1 : Marital Status Only

AGE	TOTAL	NEV. M	AR	CUR	MAR	WID	DWED	DIVC	RCD
0	77.16 100.00	28.84 3	7. 37	35. 97	46. 61	8.75	11.35	3. 61	4.67
5	73.11 100.00	24.18 3	3.08	36.41	49.80	8, 86	12. 12	3. 65	4. 99
10	68, 20 100, 00	19.21 2	3.17	36.46	53, 46	8. 87	13.01	3.66	5. 36
15	63.28 100.00	14.23 2	2. 49	36.50	57.68	8. 88	14.04	3, 66	5.79
20	58.39 100.00	9.49 1	5. 25	36. 33	62. 22	8.90	15.24	3.67	6. 28
25	53, 54 100, 00	6.89 1	2. 87	34.08	63, 65	8. 92	16.66	3.65	6. 82
30	48.68 100.00	5.77 1	1.85	30.47	62. 59	8. 92	18.33	3. 52	7.23
35	43.87 100.00	5.00 1	1.40	26.67	60. 78	8. 93	20.35	3, 28	7.47
40	39. 12 100. 00	4.36 1	1.15	22, 88	58. 49	8. 92	22.81	2. 95	7.55
45	34.44 100.00	3.78 1	D. 99	19.17	55.66	8.90	25.84	2. 59	7. 51
50	29.87 100.00	3. 25 1	D. 88	15, 56	52.11	8.83	29. 56	2. 23	7.46
55	25,46 100.00	2.75 1	D. 80	12.14	47.70	8. 68	34.08	1.89	7.41
60	21.22 100.00	2.28 1	D. 76	8.97	42.27	8.40	39. 57	1.57	7.40
65	17.20 100.00	1.85 1	0.73	6.18	35. 95	7.90	45. 91	1.27	7.41
70	13.53 100.00	1.45 1	0.72	3.97	29.37	7.10	52.49	1.00	7.41
75	10.27 100.00	1.10 1	D. 71	2.42	23. 59	5.99	58. 28	. 76	7.41
80	7,70 100.00	. 83 1	D. 71	1.59	20. 58	4.72	61.29	. 57	7.41

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## Table B 1 2 : Having a Surviving Mother

AGE	т	OTAL	NEV	. Mar	CUR	. MAR	WIDO	WED	DIVO	DRCD
0	50.06	64.88	25. 58	33, 15	21.99	28.50	. 86	1.11	1.63	2.12
5	45. 68	62.48	20, 89	28. 58	22.26	30.45	. 87	1.19	1.65	2.26
10	40.76	59.77	15.95	23. 38	22, 29	32. 68	. 87	1. 27	1.66	2.43
15	35, 86	56, 68	11.02	17.42	22. 32	35, 27	. 87	1.38	1.66	2.62
20	31.03	53.14	6.37	10. 91	22.13	37. 90	. 87	1.49	1.66	2.84
25	26. 27	49.07	3.85	7.18	19.92	37. 20	. 87	1.62	1.64	3.07
30	21.61	44. 39	2.77	5,70	16.47	33. 84	. 85	1.75	1.51	3.11
35	17. 12	39.02	2.06	4, 70	12. 95	29. 51	. 83	1.88	1.28	2, 92
40	12.87	32. 91	1.49	3.82	9, 61	24. 55	. 78	2.00	. 99	2. 53
45	8. 99	26.11	1.02	2, 95	6, 58	19.11	. 71	2.05	. 69	2.00
50	5, 64	18, 90	. 63	2.10	4.01	13.41	. 59	1.96	. 43	1.43
55	3.04	11.92	. 33	1.30	2.06	8.08	. 42	1.65	. 23	. 89
60	1.27	6.00	. 14	. 65	. 80	3.78	. 24	1.13	. 09	. 44
65	. 35	2.02	. 04	. 22	. 20	1.13	. 09	. 52	. 03	. 15
70	. 04	. 31	. 00	. 03	. 02	. 14	. 01	. 11	. 00	. 02
75	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
80	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00

Table B 1 3 Having No Surviving Mother

AGE	TOTAL	NEV. MAR	CUR. MAR	WIDOWED	DIVORCD
0	27.10 35.12	3.26 4.22	13.98 18.11	7.90 10.23	1.97 2.56
5	27, 43 37, 52	3.29 4.50	14.15 19.35	7,99 10.93	2.00 2.73
10	27.44 40.23	3.27 4.79	14. 17 20. 77	B.00 11.74	2.00 2.93
15	27.41 43.32	3.21 5.08	14.18 22.42	8.01 12.66	2.00 3.17
20	27.36 46.86	3.12 5.35	14, 21 24, 33	8.03 13.75	2.01 3.44
25	27. 27 50. 93	3.05 5.69	14.16 26.45	8.05 15.04	2.01 3.76
30	27.07 55.61	2.99 6.15	14.00 28.75	8.07 16.58	2.01 4.13
35	26.75 60.98	2.94 6.70	13.72 31.27	8.10 18.47	1.99 4.55
40	26.25 67.09	2.87 7.33	13.27 33.94	8.14 20.82	1.96 5.01
45	25, 45 73, 89	2,77 8,03	12. 59 36. 56	8.19 23.79	1.90 5.51
50	24.22 81.10	2.62 8.78	11.56 38.70	8.24 27.60	1.80 6.03
55	22.42 88.08	2.42 9.50	10.09 39.62	8, 26 32, 43	1.66 6.53
60	19.95 94.00	2.15 10.11	8.17 38.49	8.16 38.44	1.48 6.96
65	16.85 97.98	1.81 10.52	5.99 34.81	7.81 45.39	1.25 7.26
70	13.48 99.69	1.45 10.69	3, 95 29, 23	7.09 52.38	1.00 7.39
75	10.27 100.00	1.10 10.71	2.42 23.59	5, 99. 58. 28	.76 7.41
80	7, 70 100, 00	.83 10.71	1.59 20.58	4.72 61.29	. 57 7. 41

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### B 2 : LIFE EXPECTATION AND THE PERCENTAGE OF MARITAL, MATERNAL AND MARKER STATUS

### Table B 2 1 1 : All Marital States Together

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	77, 16	100.00	33. 89	43. 92	18.72	24.26	17. 58	22. 78	5.38	6. 97	. 98	1, 27	. 62	. 81
5	73.11	100.00	29.30	40.08	18. 95	25. 72	17.80	24. 34	5.44	7.44	. 99	1.35	. 63	. 86
10	68.20	100, 00	24, 33	35. 68	18.98	27.82	17.82	26.13	5.45	7.99	. 99	1.45	63	. 93
15	63.28	100.00	19.36	30.59	19.00	30. 02	17.84	28, 19	5.46	8.62	. 99	1.57	. 63	1.00
20	58. 39	100.00	14.50	24.83	18.93	32.42	17.87	30.60	5.47	9.36	. 99	1.70	. 63	1.08
25	53. 54	100.00	10.88	20, 33	17.89	33, 42	17.68	33. 01	5.46	10.19	. 99	1.86	. 63	1.19
30	48.68	100.00	9.05	18. 58	16.11	33.10	16.64	34.17	5.27	10.87	. 97	2.00	. 63	1.29
35	43.87	100.00	7. 95	18.12	14.51	33. 07	15.05	34. 30	4.87	11.10	. 90	2.06	. 60	1.37
40	39.12	100.00	7.06	18.04	12. 97	33.17	13.39	34. 24	4.34	11.10	. 81	2.07	. 54	1.39
45	34.44	100.00	6. 23	18.09	11.46	33. 28	11.76	34.15	3.80	11.04	. 71	2.06	. 47	1.38
50	29.87	100.00	5.43	18, 18	9, 98	33.40	10.17	34.04	3. 27	10.96	. 61	2.06	. 41	1.36
55	25, 46	100.00	4.66	18.30	8. 54	33, 55	8. 63	33. 90	2.77	10.86	. 52	2. 05	. 34	1.33
60	21.22	100.00	3. 72	18, 45	7.16	33. 72	7.16	33. 73	2. 28	10.75	. 43	2.05	. 28	1.30
65	17. 20	100.00	3. 21	18.64	5,84	33. 93	5.77	33. 52	1.83	10.61	. 35	2.04	. 22	1.26
70	13. 53	100.00	2. 55	18.86	4.62	34.19	4. 50	33. 26	1.41	10.44	. 27	2.03	. 16	1.22
75	10. 27	100.00	1.96	19.12	3. 54	34.47	3. 39	32. 97	1.05	10.26	. 21	2.01	. 12	1.17
80	7.70	100, 00	1.49	19.28	2.67	34.64	2. 53	32. 79	. 78	10.14	. 15	2.00	. 09	1.14

### Table B 2 1 2 : All Marital States, Having a Surviving Mother

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	50.06	64.88	28. 64	37.11	9.73	12.62	8. 51	11.03	2.48	3. 21	. 43	. 56	. 27	. 35
5	45.68	62.48	23. 99	32, 81	9.86	13.48	8. 61	11.78	2. 51	3, 43	. 44	. 60	. 27	. 37
10	40.76	59.77	19.04	27.92	9.87	14.47	8. 62	12.64	2. 51	3.68	. 44	. 64	. 27	. 40
15	35.86	56.68	14. 12	22. 32	7. <b>8</b> 8	15.61	8, 63	13.64	2.51	3.97	. 44	. 70	. 27	. 43
20	31.03	53.14	9.35	16.02	9.80	16. 78	8. 65	14. 81	2. 52	4. 31	. 44	. 76	. 27	. 47
25	26. 27	49.07	5.84	10. 91	8.77	16.39	8.44	15.76	2. 50	4.68	. 44	. 82	. 27	51
30	21.61	44. 39	4, 09	8.40	7.07	14. 52	7.43	15. 27	2. 34	4.80	. 42	. 86	. 27	. 55
35	17.12	39.02	3,07	6.99	5. 57	12.69	5. 95	13. 56	1. 94	4.43	. 35	. 81	24	. 55
40	12.87	32.91	2. 27	5.81	4. 20	10. 73	4.47	11.44	1.47	3.77	. 27	. 69	. 19	. 48
45	8, 77	26.11	1.58	4.60	2. 94	8. 54	3.12	9.06	1.03	2. 98	. 19	. 54	. 13	. 39
50	5.64	18. 90	1.00	3. 34	1.85	6. 20	1.96	6. 55	. 64	2.15	. 12	. 39	. 08	. 28
55	3.04	11. 72	. 54	2.11	1.00	3. 72	1.05	4. 12	. 34	1.35	. 06	. 25	. 04	. 17
60	1.27	6.00	. 23	1.07	. 42	1. 78	. 44	2.06	. 14	. 67	. 03	. 12	. 02	. 09
65	. 35	2.02	. 06	. 36	. 12	. 67	. 12	. 69	. 04	. 22	. 01	. 04	. 00	. 03
70	. 04	. 31	. 01	. 06	. 01	. 10	. 01	. 11	. 00	. 03	. 00	. 01	. 00	. 00
75	. 00	. 00	. 00	. 00	. 00	, 00	. 00	. 00	. 00	. 00	. 00	. 00 .	. 00	. 00
80	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00

# Table B 2 1 3 : All Marital States, Having No Surviving Mother

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	27.10	35.12	5. 25	6.81	8. 99	11.64	9.07	11.76	2. 90	3.76	. 54	. 70	. 35	. 46
5	27.43	37. 52	5. 31	7.26	9.10	12.44	7.18	12.56	2. 93	4.01	. 55	. 75	. 36	. 49
10	27.44	40. 23	5. 29	7.75	9.11	13.36	9.19	13.48	2, 94	4.31	. 55	. 81	. 36	. 53
15	27.41	43. 32	5. 24	8.28	9.12	14.41	9.21	14.55	2, 94	4.65	. 55	. 87	. 36	. 57
20	27.36	46.86	5.15	8. 82	9.13	15.64	9. 22	15.80	2.95	5.05	. 55	. 95	. 36	. 62
25	27.27	50. 93	5.04	9.42	9.12	17.03	9.24	17.26	2. 95	5. 52	. 55	1.03	. 36	. 67
30	27.07	55. 61	4. 96	10, 18	9.05	18.58	9. 20	18. 90	2. 95	6.06	. 55	1.14	. 36	. 74
35	26.75	60.98	4.88	11.13	8. 94	20. 38	9.10	20.74	2. 92	6.67	. 55	1.25	. 36	. 82
40	26.25	67.09	4.79	12.24	8.78	22.44	8. 92	22. 81	2. 87	7.33	. 54	1.38	. 35	. 90
45	25.45	73.89	4.65	13.49	8, 52	24.74	8.64	25.09	2.77	8.06	. 52	1.52	. 34	. 99
50	24. 22	81.10	4.43	14.85	8.13	27. 21	8. 21	27, 49	2.63	8.81	. 50	1.67	. 32	1.08
55	22.42	88. 08	4. 12	16.19	7.54	27.62	7.58	29.78	2. 42	9.52	. 46	1.81	. 30	1.16
60	19.95	94.00	3.69	17.38	6.74	31.74	6.72	31.67	2.14	10.08	. 41	1.92	. 26	1.22
65	16.85	97.98	3.14	18.27	5.72	33. 26	5.65	32. 83	1.79	10.39	. 34	2.00	. 21	1.24
70	13.48	99. 69	2, 54	18, 81	4. 61	34.09	4.48	33, 15	1.41	10.41	. 27	2.02	. 16	1.21
75	10.27	100.00	1.96	19.12	3.54	34.47	3.39	32. 97	1.05	10.26	. 21	2.01	. 12	1.17
80	7.70	100.00	1.49	19.28	2.67	34.64	2, 53	32. 79	. 78	10. 14	. 15	2.00	. 09	1.14

Table B 2 2 1 : Never-Married : All

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	28.84	37. 37	27.27	35. 34	1.57	2.04	. 00	. 00	. 00	. 00	.`00	. 00	. 00	. 00
5	24. 18	33.08	22. 59	30.90	1.59	2.17	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
10	19. 21	28.17	17.62	25.84	1.59	2.33	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
15	14. 23	22.49	12.64	19.97	1. 59	2. 52	. <b>O</b> Q	. 00	. 00	. 00	. 00	. 00	. 00	. 00
20	9.49	16.25	7.91	13. 55	1.58	2.70	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
25	6.87	12.87	5.40	10.08	1.50	2.79	. 00	. 00	. 00	. 00	. 00.	. 00	. 00	. 00
30	5.77	11.85	4.39	9.02	1.38	2.83	. 00	. 00	00	. 00	. 00	. 00	. 00	. 00
35	5.00	11.40	3.77	8.59	1. 23	2.81	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
40	4.36	11.15	3. 28	8. 38	1.08	2.77	. 00	. 00		. 00	. 00	. 00	. 00	. 00
45	3.78	10. 99	2. 84	8.26	. 94	2.73	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
50	3. 25	10.88	2.44	8.18	. 80	2.69	. 00	. 00	. 00	.,00	. 00	. 00	. 00	. 00
55	2.75	10.80	2.07	8.14	. 68	2.67	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
60	2, 28	10.76	1.72	8.11	. 56	2.65	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
65	1.85	10.73	1.39	8.11	. 45	2.63	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
70	1.45	10.72	1.10	8.11	. 35	2. 61	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
75	1.10	10.71	. 83	8.13	. 27	2.59	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
80	. 83	10. 71	. 63	8.14	. 20	2.58	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00

Table B 2 2 2 : Never-Married; Having A Surviving Mother

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
ō	25.58	33.15	24.74	32.06	. 84	1.09	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
5	20.89	28.58	20.04	27.42	. 85	1.16	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
10	15.95	23.38	15.09	22.13	. 85	1.25	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
15	11.02	17.42	10.17	16,07	. 85	1.35	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
20	6.37	10.91	5. 53	9.48	. 83	1.43	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
25	3.85	7.18	3.09	5.77	. 75	1.41	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
30	2.77	5.70	2. 13	4. 38	. 64	1.32	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
35	2.06	4.70	1.56	3.54	. 51	1.16	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
40	1.49	3.82	1.12	2,86	. 38	. 96	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
45	1.02	2.95	. 76	2.21	. 26	. 74	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
50	. 63	2.10	. 47	1.57	. 16	. 53	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
55	. 33	1.30	. 25	. 98	. 08	. 33	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
60	. 14	. 65	. 10	. 49	. 03	. 16	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
65	. 04	. 22	. 03	. 16	. 01	. 05	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
70	. 00	. 03	. 00	. 02	. 00	. 01	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
75	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	, 00	. 00	. 00
80	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00

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## B 2 2 3 : Never-Married; Having No Surviving Mother

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	3.26	4. 22	2. 53	3. 28	. 73	. 95	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
5	3, 29	4.50	2.55	3.49	. 74	1.01	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
10	3. 27	4.79	2. 53	Э. 70	. 74	1.08	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
15	3. 21	5.08	2.47	3, 91	. 74	1.17	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
20	3.12	5.35	2.38	4.08	. 74	1.27	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
25	3.05	5.69	2. 31	4.31	. 74	1.38	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
30	2.99	6.15	2.26	4.64	. 74	1.51	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
35	2.94	6.70	2. 21	5.04	. 73	1.66	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
40	2.87	7.33	2.16	5. 52	. 71	1.81	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
45	2.77	8.03	2.08	6.05	. 68	1.99	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
50	2, 62	8.78	1.97	6.61	. 65	2.17	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
55	2.42	9.50	1.82	7.16	, 60	2.34	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
60	2.15	10.11	1.62	7.63	. 53	2.48	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
65	1.81	10. 52	1.37	7.94	. 44	2.57	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
70	1.45	10.69	1.09	8.09	. 35	2.60	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
75	1.10	10.71	. 83	8.13	. 27	2. 59	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
80	. 83	10, 71	. 63	8.14	. 20	2. 58	. 00	. 00	. 00	. 00	. 00	. 00	. 00	, 00

Table B 2 3 1 : Currently Married : All

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	35.97	46.61	5.10	6.61	12.73	16.49	13.00	16.84	3. 97	5.14	. 71	. 92	. 46	. 60
5	36.41	49.80	5.16	7.06	12. 88	17.62	13.16	18.00	4. 02	5.49	. 72	. 99	. 47	. 64
10	36.46	53.46	5.17	7.58	12. 90	18. 92	13.17	17.32	4. 02	5.90	. 72	1.06	. 47	. 69
15	36.50	57.68	5.18	8.18	12.92	20.41	13.19	20. 84	4. 03	6.36	. 72	1.14	. 47	. 74
20	36. 33	62.22	5.04	8, 63	12.86	22. 02	13.21	22. 62	4. 03	6. 91	. 73	1.24	. 47	. 80
25	34.08	63.65	3, 95	7.39	11.90	22.23	13.01	24. 29	4, 02	7.51	. 72	1.35	. 47	. 88
30	30.47	62.59	3.17	6.51	10.30	21.15	11.99	24.62	3.85	7.92	. 70	1.44	. 46	. 95
35	26.67	60.78	2, 74	6.24	8, 94	20.38	10.47	23.86	3.45	7.86	. 64	1.45	. 43	. 99
40	22.88	58.49	2.39	6.10	7.69	19.65	8. 93	22, 83	2. 95	7.53	. 54	1.39	. 38	. 97
45	19.17	55.66	2.04	5. 93	6, 47	18. 78	7.44	21.61	2.45	7.11	. 45	1.32	. 32	. 92
50	15.56	52.11	1.69	5.66	5. 27	17.65	6. 01	20.13	1.97	6.59	. 37	1.23	. 25	. 84
55	12.14	47.70	1.35	5.29	4.13	16.24	4.67	18.33	1.52	5.97	. 29	1.12	. 19	. 76
60	8, 97	42.27	1.01	4. 78	3.07	14.49	3.43	16.14	1.11	5.23	. 21	. 99	. 14	. 65
65	6.18	35.95	. 72	4.16	2.14	12.42	2. 34	13.62	. 75	4. 37	. 14	. 84	. 09	. 54
70	3.97	29.37	. 47	3.49	1.39	10.27	1.49	11.02	. 47	3.50	. 09	. 68	. 06	. 42
75	2.42	23. 59	. 30	2.89	. 86	8.35	. 90	8.75	. 28	2.75	. 06	. 54	. 03	. 32
80	1.59	20. 58	. 20	2. 57	. 57	7.35	. 58	7.57	. 18	2.36	. 04	. 47	. 02	. 27

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Table B	2	3	2	:	Currently	Married;	Having	a	Surviving	Mother
lable b	۲.	J	2	•	ourrently	nurricuş	nating	~	carring	

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	21.99	28.50	3.54	4. 59	7.96	10. 32	7.62	9.88	2. 23	2.89	. 39	. 51	. 24	. 32
5	22.26	30.45	3. 59	4. 91	8.06	11.03	7.72	10.56	2. 25	3.08	. 39	. 54	. 25	. 34
10	22. 29	32.68	3. 59	5. 27	8.07	11.84	7.73	11.33	2.26	3.31	. 40	. 58	. 25	. 36
15	22. 32	35. 27	3. 60	5.68	8.08	12.77	7.74	12.23	2. 26	3. 57	. 40	. 63	. 25	. 39
20	22.13	37.90	3, 46	5. 92	8. 02	13, 73	7.75	13. 27	2.26	3.88	. 40	. 68	. 25	. 42
25	19.92	37.20	2.41	4. 50	7.08	13.22	7.54	14.08	2. 25	4. 20	. 40	. 74	. 25	. 46
30	16.47	33.84	1.66	3.41	5.55	11, 40	6.56	13.48	2.09	4. 28	. 37	. 77	. 24	. 50
35	12. 95	29.51	1.26	2.88	4. 30	9.79	5.16	11.75	1.71	3.87	. 31	. 71	. 21	. 49
40	9.61	24, 55	. 95	2, 43	3.19	8.15	3.80	9.72	1.27	3.24	. 23	. 59	. 17	. 43
45	6. 58	19.11	. 67	1. 94	2.19	6. 37	2. 59	7.52	. 86	2.50	. 16	. 46	. 11	. 33
50	4.01	13.41	. 42	1.39	1.34	4.48	1.57	5. 25	. 52	1.74	. 10	. 32	. 07	. 23
55	2.06	8.08	. 22	. 86	. 69	2.71	. 80	3.14	. 26	1.04	. 05	. 19	. 03	. 14
60	. 80	3.78	. 09	. 41	. 27	1.27	. 31	1.46	. 10	. 48	. 02	. 09	. 01	. 06
65	. 20	1.13	. 02	. 13	. 07	. 38	. 08	. 44	. 02	. 14	. 00	. 03	. 00	. 02
70	. 02	. 14	. 00	. 02	. 01	. 05	. 01	. 05	. 00	. 02	. 00	. 00	. 00	. 00
75	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
80	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00

Table B 2 3 3 : Currently Married; Having No Surviving Mother

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	13.98	18, 11	1.56	2.02	4.76	6.17	5.37	6.96	1.74	2.26	. 32	. 42	. 22	. 28
5	14.15	19.35	1.58	2.16	4, 82	6.60	5.44	7.44	1.76	2.41	. 33	. 45	. 22	. 30
10	14.17	20.77	1. 58	2.31	4.83	7.08	5.45	7.99	1, 76	2. 59	. 33	. 48	. 22	. 32
15	14.18	22.42	1.58	2.50	4.83	7.64	5.45	8.62	1, 77	2.79	. 33	. 52	. 22	. 35
20	14.21	24. 33	1.58	2.71	4.84	8. 27	5.46	9.36	1.77	3.03	. 33	. 56	. 22	. 38
25	14.16	26.45	1.55	2.87	4, 82	9.00	5.47	10.21	1.77	3. 31	. 33	. 62	. 22	. 42
30	14.00	28.75	1.51	3.10	4.74	9.74	5.42	11.14	1.77	3.63	. 33	. 68	. 22	. 46
35	13.72	31.27	1.48	3.37	4.64	10. 59	5. 31	12.11	1.74	3.96	. 32	. 74	. 22	. 50
40	13. 27	33. 94	1.44	3.67	4.50	11.50	5.13	13.12	1.68	4. 29	. 31	. 80	. 21	. 55
45	12. 59	36.56	1.37	3. 99	4. 27	12.41	4.86	14.10	1.59	4.61	. 30	. 86	. 20	. 59
50	11.56	38.70	1.28	4. 27	3. 93	13.17	4.44	14.88	1.45	4.85	. 27	. 91	. 18	. 62
55	10.09	39.62	1.13	4, 43	Э. 44	13.53	3.87	15.18	1.26	4. 93	. 24	. 93	. 16	. 62
60	8.17	38.49	. 93	4. 37	2, 80	13.21	3.11	14.68	1.01	4, 75	. 19	. 90	. 13	. 59
65	5.99	34.81	. 69	4.03	2.07	12.04	2. 27	13.18	. 73	4. 23	. 14	. 81	. 07	. 52
70	3.95	29. 23	. 47	3.48	1.38	10.22	1.48	10. 96	. 47	3.48	. 09	. 68	. 06	. 42
75	2.42	23. 59	. 30	2.89	. 86	8.35	. 90	8.75	. 28	2.75	. 06	. 54	. 03	. 32
80	1.59	20. 58	. 20	2.57	. 57	7.35	. 58	7.57	. 18	2.36	. 04	. 47	. 02	. 27

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Table B 2 4 1 : Widowed : All

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	8.75	11.35	1.03	1.34	3. 07	3.97	3. 29	4.26	1.04	1.35	. 20	. 26	. 12	. 16
5	8.86	12.12	1.05	1.43	3.11	4. 25	3. 33	4. 55	1.06	1.44	. 20	. 28	. 13	. 17
10	8. 87	13.01	1.05	1.54	Э. 11	4. 56	3. 33	4.87	1.06	1.55	. 20	. 30	. 13	. 19
15	8. 88	14.04	1.05	1.66	3.11	4. 92	3.34	5.27	1.06	1.67	. 20	. 32	. 13	. 20
20	8. 90	15, 24	1.05	1.80	3.12	5.34	3. 34	5.72	1.06	1.81	. 20	. 35	. 13	. 22
25	8. 92	16.66	1.05	1.96	3.12	5.84	3.35	6.26	1.06	1.98	. 20	. 38	. 13	. 24
30	8, 72	18.33	1.05	2.15	3.13	6.42	3.36	6.90	1.07	2.19	. 20	. 42	. 13	. 26
35	8, 73	20. 35	1.04	2.37	3.12	7.12	3. 36	7.66	1.07	2.43	. 20	. 47	. 13	. 29
40	8. 92	22. 81	1.04	2.66	3.12	7.98	3.36	8.60	1.07	2.73	. 20	. 52	. 13	. 33
45	8.90	25.84	1.04	3.01	3.11	9.03	3.35	9.74	1.07	3.10	. 20	. 59	. 13	. 37
50	8, 83	29.56	1.03	Э. 44	3.09	10.33	3. 33	11.14	1.06	3.54	. 20	. 68	. 13	. 43
55	8, 68	34.08	1.01	3. 98	3.04	11.92	3. 27	12. 83	1.04	4.08	. 20	. 78	. 12	. 49
60	8.40	37. 57	. 99	4.65	2.94	13.87	3.15	14.86	1.00	4. 72	. 19	. 71	. 12	. 56
65	7.90	45. 91	. 94	5.45	2.78	16.14	2.96	17.19	. 94	5.44	. 18	1.05	. 11	. 64
70	7.10	52.49	. 85	6. 31	2. 51	18. 56	2.64	19.55	. 83	6.15	. 16	1.20	. 10	. 72
75	5.99	58.28	. 73	7.14	2.13	20.75	2. 22	21.56	. 69	6.74	. 14	1.33	. 08	. 77
80	4. 72	61.29	. 58	7.59	1.69	21. 92	1. 74	22. 57	. 54	7.02	. 11	1.39	. 06	. 80

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	. 86	1.11	. 11	. 14	. 30	. 39	. 32	. 41	. 10	. 13	. 02	. 02	. 01	. 02
5	. 87	1.19	. 11	. 15	. 31	. 42	. 32	. 44	. 10	. 14	. 02	. 02	. 01	. 02
10	. 87	1.27	. 11	. 16	. 31	. 45	. 32	. 47	. 10	. 15	. 02	. 03	. 01	. 02
15	. 87	1.38	. 11	. 17	. 31	. 48	. 32	. 51	. 10	. 16	. 02	. 03	. 01	. 02
20	. 87	1.49	. 11	. 19	. 31	. 53	. 32	. 55	. 10	. 17	. 02	. 03	. 01	. 02
25	. 87	1.62	. 11	. 20	. 31	. 57	. 32	. 61	. 10	. 19	. 02	. 03	. 01	. 02
30	. 85	1.75	. 10	. 20	. 30	. 61	. 32	. 66	. 10	. 21	. 02	. 04	. 01	. 03
35	. 83	1.88	. 09	. 21	. 29	. 65	. 31	. 72	. 10	. 23	. 02	. 04	. 01	. 03
40	. 78	2.00	. 07	. 22	. 27	. 69	. 30	. 77	. 10	. 25	. 02	. 04	. 01	. 03
45	. 71	2.05	. 08	. 22	. 24	. 70	. 27	. 79	. 09	. 26	. 02	. 05	. 01	. 03
50	. 59	1.96	. 06	. 21	. 20	. 67	. 23	. 76	. 07	. 25	. 01	. 05	. 01	. 03
55	. 42	1.65	. 05	. 18	. 14	. 56	. 16	. 64	. 05	. 21	. 01	. 04	. 01	. 03
60	. 24	1.13	. 03	. 12	. 08	. 38	. 07	. 43	. 03	. 14	. 01	. 03	. 00	. 02
65	. 09	. 52	. 01	. 06	. 03	. 18	. 03	. 20	. 01	. 06	. 00	. 01	. 00	. 01
70	. 01	. 11	. 00	. 01	. 01	. 04	. 01	. 04	. 00	. 01	. 00	. 00	. 00	. 00
75	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
80	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00

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Table B 2 4 2 : Widowed; Having a Surviving Mother

## Table B 2 4 3 : Widowed; Having No Surviving Mother

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	7.90	10.23	. 93	1.20	2. 77	3.58	2.97	3.85	. 94	1.22	. 18	. 24	. 11	. 15
5	7.99	10.93	. 94	1.28	2, 80	3.83	3.01	4.11	. 95	1.31	. 18	. 25	. 11	. 16
10	8.00	11.74	. 94	1.38	2.80	4.11	3.01	4.41	. 96	1.40	. 18	. 27	. 11	. 17
15	8.01	12.66	. 94	1.48	2, 81	4.44	3.01	4, 76	. 96	1.51	. 18	. 29	. 11	. 18
20	8. 03	13.75	. 94	1.61	2, 81	4.82	3. 02	5.17	. 96	1.64	. 18	. 32	. 11	. 20
25	8.05	15.04	. 94	1,76	2.82	5.27	3. 03	5.65	. 96	1.79	. 18	. 35	. 11	. 21
30	8.07	16.58	. 95	1.94	2. 83	5.81	3.04	6.24	. 96	1.98	. 19	. 38	. 12	. 24
35	8, 10	18.47	. 95	2.16	2.84	6.47	3.05	6. 95	. 97	2. 20	. 19	. 42	. 12	. 26
40	8.14	20.82	. 95	2.44	2.85	7. 29	3.06	7.83	. 97	2.49	. 19	. 48	. 12	. 30
45	8.19	23.79	. 96	2.78	2, 87	8. 33	3.08	8. 95	. 78	2.84	. 19	. 55	. 12	. 34
50	8. 24	27.60	. 97	3, 23	2.89	9.66	3.10	10.38	. 98	3.30	. 19	. 63	. 12	. 39
55	8, 26	32. 43	. 97	3,80	2.87	11.36	3.10	12.19	. 99	3.87	. 19	. 75	. 12	. 46
60	8.16	38.44	. 96	4. 53	2.86	13.48	3.06	14.43	. 97	4. 57	. 19	. 88	. 12	. 54
65	7.81	45.39	. 93	5.39	2.75	15.97	2. 92	16.99	. 92	5.37	. 18	1.04	. 11	. 64
70	7.09	52. 38	. 85	6.30	2, 50	18. 52	2.64	19.51	. 83	6.14	. 16	1.20	. 10	72
75	5. 99	58. 28	. 73	7.14	2. 13	20.75	2. 22	21.56	. 69	6.74	. 14	1.33	. 08	. 77
80	4, 72	61.29	. 58	7. 59	1.69	21. 92	1. 74	22. 57	. 54	7.02	. 11	1.39	. 06	. 80

Table B 2 5 1 : Divorced : All

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	3.61	4.67	. 49	. 63	1.36	1.76	1.29	1.68	. 37	. 48	. 06	. 08	. 04	. 05
5	3. 65	4. 99	. 49	. 68	1.37	1.88	1.31	1.79	. 37	. 51	. 07	. 09	. 04	. 05
10	3.66	5.36	. 49	. 73	1.38	2.02	1.31	1.92	. 37	. 55	. 07	. 10	. 04	. 05
15	3.66	5.79	. 50	. 78	1.38	2.18	1.31	2.08	. 37	. 59	. 07	. 10	. 04	. 06
20	3.67	6.28	. 50	. 85	1.38	2.36	1.32	2. 25	. 37	. 64	. 07	. 11	. 04	. 06
25	3. 65	6.82	. 49	. 91	1.37	2. 57	1. 32	2.46	. 37	. 70	. 07	. 12	. 04	. 07
30	3. 52	7.23	. 44	. 91	1.31	2.70	1.29	2.65	. 37	. 76	. 07	. 14	. 04	. 08
35	3. 28	7.47	. 40	. 91	1.21	2.75	1. 22	2.77	. 35	. 81	. 06	. 14	. 04	. 08
40	2.95	7.55	. 35	. 90	1.08	2.76	1.10	2.81	. 32	. 83	. 06	. 15	. 03	. 09
45	2.59	7.51	. 31	. 90	. 95	2.75	. 96	2.80	. 29	. 83	. 05	. 15	. 03	. 09
50	2.23	7.46	. 27	. 90	. 81	2.73	. 83	2.77	. 25	. 83	. 04	. 15	. 03	. 09
55	1.89	7.41	. 23	. 90	. 69	2.72	. 70	2.75	. 21	. 82	. 04	. 15	. 02	. 09
60	1.57	7.40	. 19	. 91	. 58	2.72	. 58	2.73	. 17	. 81	. 03	. 15	. 02	. 08
65	1.27	7.41	. 16	. 93	. 47	2, 74	. 47	2.71	. 14	. 80	. 03	. 15	. 01	. 08
70	1,00	7.41	. 13	. 94	. 37	2.76	. 36	2.69	. 11	. 79	. 02	. 15	. 01	. 08
75	. 76	7.41	. 10	. 97	. 29	2.78	. 27	2.67	. 08	. 77	. 02	. 15	. 01	. 08
80	. 57	7.41	. 08	. 98	. 22	2.79	. 20	2. 65	. 06	. 76	. 01	. 15	. 01	. 07

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## Table B 2 5 2 : Divorced; Having a Surviving Mother

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	1.63	2.12	. 25	. 32	. 63	. 82	. 57	. 73	. 15	. 20	. 03	. 03	. 01	. 02
5	1.65	2.26	. 25	. 34	. 64	. 87	. 57	. 78	. 15	. 21	. 03	. 04	. 01	. 02
10	1.66	2.43	. 25	. 36	. 64	. 94	. 57	. 84	. 15	. 23	. 03	. 04	<sup>1</sup> .01	. 02
15	1.66	2.62	. 25	. 39	. 64	1.01	. 57	. 91	. 15	. 24	. 03	. 04	. 01	. 02
20	1.66	2.84	. 25	. 43	. 64	1.10	. 58	. 99	. 15	. 26	. 03	. 05	. 01	. 02
25	1.64	3.07	. 24	. 44	. 63	1.18	. 57	1.07	. 15	. 29	. 03	. 05	. 01	. 03
30	1.51	3.11	. 20	. 41	. 57	1.18	. 55	1.13	. 15	. 31	. 03	. 05	. 01	. 03
35	1.28	2. 92	. 16	. 36	. 48	1.08	. 48	1.09	. 14	. 31	. 02	. 05	. 01	. 03
40	. 99	2. 53	. 12	. 30	. 36	. 93	. 37	. 95	. 11	. 28	. 02	. 05	. 01	. 03
45	. 69	2.00	. 08	. 23	. 25	. 73	. 26	. 76	. 08	, 23	. 01	. 04	. 01	. 02
50	. 43	1.43	. 05	. 16	. 15	. 52	. 16	. 54	. 05	. 16	. 01	. 03	. 01	. 02
55	. 23	. 87	. 03	. 10	. 08	. 32	. 07	. 34	. 03	. 10	. 00	. 02	. 00	. 01
60	. 09	. 44	. 01	. 05	. 03	. 16	. 04	. 17	. 01	. 05	. 00	. 01	. 00	. 01
65	. 03	. 15	. 00	. 02	. 01	. 05	. 01	. 06	. 00	. 02	. 00	. 00	. 00	. 00
70	. 00	. 02	. 00	. 00	. 00	. 01	. 00	. 01	. 00	. 00	. 00	. 00	. 00	. 00
75	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00
80	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	. 00	00	. 00	. 00	. 00

Table B 2 5 3 : Divorced; Having No Surviving Mother

AGE	TOTAL	PERCENT	CHILD-0	PERCENT	CHILD-1	PERCENT	CHILD-2	PERCENT	CHILD-3	PERCENT	CHILD-4	PERCENT	CHILD-5	PERCENT
0	1.97	2.56	. 24	. 31	. 73	. 94	. 73	. 94	. 21	. 28	. 04	. 05	. 02	. O3
5	2.00	2.73	. 25	. 34	. 74	1.01	. 74	1.01	. 22	. 30	. 04	. 05	. 02	. 03
10	2.00	2.93	. 25	. 36	. 74	1.08	. 74	1.08	. 22	. 32	. 04	. 06	. 02	. 03
15	2.00	3.17	. 25	. 39	. 74	1.17	. 74	1.17	. 22	. 34	. 04	. 06	. 02	. 04
20	2.01	3.44	. 25	. 42	. 74	1.27	. 74	1.27	. 22	. 37	. 04	. 07	. 02	. 04
25	2.01	3.76	. 25	. 46	. 74	1.38	. 74	1.39	. 22	. 41	. 04	. 07	. 02	. 04
30	2.01	4.13	. 25	. 50	. 74	1.52	. 74	1.53	. 22	. 45	. 04	. 08	. 02	. 05
35	1.99	4.55	. 24	. 55	. 73	1.67	. 74	1.68	. 22	. 50	. 04	. 09	. 02	. 05
40	1.96	5.01	. 24	. 61	. 72	1.84	. 73	1.86	. 22	. 55	. 04	. 10	. 02	. 06
45	1.90	5.51	. 23	. 67	. 70	2. 02	. 70	2.04	. 21	. 61	. 04	. 11	. 02	. 06
50	1.80	6.03	. 22	. 73	. 66	2. 21	. 67	2. 23	. 20	. 66	. 04	. 12	. 02	. 07
55	1.66	6. 53	. 20	. 80	. 61	2.40	. 61	2.41	. 18	. 72	. 03	. 13	. 02	. 08
60	1.48	6.96	. 18	. 86	. 54	2.56	. 54	2.56	. 16	. 76	. 03	. 14	. 02	. 08
65	1.25	7.26	. 16	. 91	. 46	2, 68	. 46	2.66	. 13	. 78	. 03	. 15	. 01	. 08
70	1.00	7.39	. 13	. 94	. 37	2.75	. 36	2.68	. 11	. 78	. 02	. 15	. 01	. 08
75	. 76	7.41	. 10	. 97	. 29	2.78	. 27	2.67	. 08	. 77	. 02	. 15	. 01	. 08
80	. 57	7.41	. 08	. 98	. 22	2.79	. 20	2.65	. 06	. 76	. 01	. 15	. 01	. 07

#### FOOTNOTES

(\*1) The reader will perhaps find the following schema useful as an orderly arrangement of the concepts involved in the discussion:

a) - Single Decrement Table

- Example (used as illustration): the life table
- One initial state: the live (or "alive") state
- One type of decrement: due to mortality
- One absorbing state: state of death
- Other examples: the gross nuptiality table

b) - Multiple Decrement Table

- Example (used as illustration): the cause of death table
- One initial state: the live state
- Many types of decrement: due to different mutually exclusive causes of death
- One or many absorbing states: one state (i.e. death) in the

case of cause of death tables

- Other examples: the net nuptiality table

c) - Increment-decrement tables

- Example (used as illustration): the marital status life table (MSLT) with 4 transition

### states\*\*

- One or many initial states: only one (the never-married state) in the case of MSLT

- Many types of (a) increments: entries into the married,

divorced and widowed states.

(b) decrements: exits from the never married.

married, divorced and widowed states.

 Many transition states:\*\* Never married, married, widowed and divorced.

- Only one absorbtion state: state of death.

- Other examples: multiregional life table.

- (\*2) The volume of the pertinent literature has grown rapidly in recent years. See especially Rogers (1975), Willekens and Rogers (1978) and Ledent (1980).
- (\*3) Wijewickrema and Bulté (1983) have also made use of multiregional (increment-decrement) life tables in Belgian population projections.
- (\*4) An age specific exposure rate is defined as the ratio of the number of events (of interest) occurring during a specified age interval to the number of person years of exposure to risk in the same interval. The denominator in question is estimated, on the assumption of uniformly distributed events, as being equal to the number of persons at mid-interval who have not yet experienced the event. Details concerning the computation of these rates are given in Appendix I. Probabilities of transition from one state to another are obtained from exposure rates by standard multi-state techniques which are described in any one of the books cited above - e.g. Willekens & Rogers 1978.
- (\*5) The errors introduced by these approximations are negligible. (1) Only a very small percentage of women have fifth order births, and an insignificant fraction goes beyond that. (2) Illegitimate births being

most often unwanted and the result of miscalculations, it can safely be presumed that one such experience would induce enough prudence, in most women, to prevent a second occurrance.

- (\*6) This observation, which seems to labour the obvious, takes on a special shade of meaning because of the presence of transitions related to maternal states it is only because a child born to a mother aged  $a(a\langle x \rangle)$  survives to age x that one can speak of a maternal status change from (c-1) to c.
- (\*7)  $l_{m,p,e}(x,a)$  is thus called a "partial" life table population (<u>ita</u> Bongaarts) in contradistinction to  $l_{m,p,e}(x)$ , the final life table population to be calculated. The two populations are identical when a = x.
- (\*8) Assuming an uniform distribution of events, the probability of moving from parity (p-1) to parity p within the age interval a,(a+h) - for women aged a and in marital status m (i.e.  $b'_{p}(a,m)$ ) - is equal to  $b_{p}(a,m)/2$ , where  $b_{p}(a,m)$  represents the corresponding probability for the age interval a,(a+1).  $b'_{p+1}(a,m)$  has an analogously identical significance.
- (\*9) Cf. especially Willekens & Alii (1982) and Wijewickrema & Alii (1983).
- (\*10)  $b'_{p}(a+h,m)$ , which covers the interval (a+h), (a+i), is given the value  $b_{p}(a,m)/(2-b'_{p}(a,m))$ . This ensures that  $b'_{p}(a,m)$  and  $b'_{p}(a+h,m)$  acting successively over the two half intervals a, (a+h) and (a+h), (a+i) have the same effect as  $b_{p}(a,m)$  over the whole interval a, (a+i).
- (\*11) Some explanatory notes are found in Appendix II.
- (\*12) Cf. Willekens and Alii (1982).

- (\*13) In other words, whenever a change of an age specific exposure rate schedule was needed so as to move from one FSL table to another (e.g. from C2 to M1), the schedule in question was used as the starting point of calculations leading up to a single decrement table; with all the entries of the events column of this table then being changed (i.e. multiplied) by the same fraction. The standard process of converting age specific exposure rates to probabilities and then moving on to a single decrement table was followed for this purpose. Since the probabilities thus obtained (for a given process) are influenced by (i.e. are "dependent" on) the presence of other competing processes the same is also true of the events column of the ensuing table. Thus their sum (which in other circumstances stands for the intensity of the process studied) was only used as a helpfull parameter for controlling changes of the original series of exposure rates. When necessary, this sum will be referred to as an "intensity".
- (\*14) Note that the "intensity" of a process calculated through the use of exposure rates obtained from cross-sectional data (i.e. data characterising a given calendar year) may differ substantially from the value obtained by summing the corresponding "reduced events". (A reduced event and an exposure rate, for a specified process & duration interval, are both ratios which are identical but for their denominators: that figuring in a reduced event makes use of a simple mid-interval population, which estimates the number of person years of simple exposure experienced - as opposed to exposure to risk of the process concerned. Cf. Note 4). Keilman (1985) makes useful comments in this regard.

Note also that the sum of reduced events related to a process in a given calendar year is sometimes referred to as an "intensity".

The "intensities" of order specific marital fertility used in C2 - i.e. "intensities" obtained by calculations starting with exposure rates were found to be by and large much higher than the corresponding values obtained for these same "intensities" by Willems, Wijewickrema & Lesthaeghe (1981), who had used the equivalent of reduced events for this purpose. It seemed consequently useful to experiment with a set of "intensities" which were fairly close to the last mentioned set. The "intensities" used in M2 were thus brought close to the lowest found by Willems, Wijewickrema and Lesthaeghe. The order specific fertility schedules used in M1 have "intensities" between those of C2 and M2.

The common first marriage and remarriage schedules used in M3, M4 and M5 form a plausible very low "intensity" nuptiality related schedule of the future. The common divortiality schedule used (in M3, M4 and M5) is on the contrary a plausible high "intensity" schedule of the future.

- (\*15) "Nego 4" is the name of a survey carried out during the period November 1982 - June 1983 by the Centrum voor Bevolkings- en Gezinsstudien in Brussels. The exposure rates extracted from Nego 4 relate to transitions observed retrospectively and thus cover a period when entry into first marriage was markedly more intense than around the census of 1981.
- (\*16) Apart from the tables described above in the text, others referring explicitly to parity status (as opposed to maternal status) were also constructed. They have been left out of the description given in the

text because of the cumberstone quality of their format. Copies of all these tables may be obtained on request.

- (\*17) The curves taken from C1\*\* have not been presented in Fig. 2 in order to make it easier to read the figure.
- (\*18) It is useful to recall the fact that C2 is built on data extracted from a real situation (i.e. that of 1980-81), while M2, M4 and M5 are mere simulated modifications of C2.
- (\*19) Thus subtractions from the "1 CH" column are added to the "2 CH" column (just as "3 CH" gains what "2 CH" loses). A smaller "1 CH" column does not therefore necessarily mean a less favourable fertility schedule. It can (as in our case) merely be the result of a more favourable "2 CH" schedule. Note how the difference between the "1 CH" and "2 CH" columns decreases when one goes from C1 to C2.
- (\*20) After preliminary cleaning-up processes had done their work on the original Nego 4 sample, only the records of 2834 women were available for analysis. Of these only 195 (i.e. less than 7%) entered the state of cohabitation. Exposure rates covering transitions from the never-unioned state to that of cohabitation on the one hand and from the state of cohabitation to that of marriage on the other are badly affected by this scarcity in numbers.
- (\*21) It is useful to recall the fact that N1 differs from C2 only in so far as exposure rates covering transitions prior to and leading up to first marriage are concerned. Mortality remains the same in the two cases.

- (\*22) Many women who, in a system of four marital states, would be counted as never-married now acquire the status of cohabitors. In all the FSL models with five marital states, NM thus stands for the never-unioned state.
- (\*23) The "small number" problem, already referred to, made the computation of the exposure rates in question at ages above 25 impossible. The constant value used from age 25 onwards - it corresponded to a transition probability of 0.9 - was therefore hypothetical. Hardly any woman in cohabitation would consequently escape marriage in this case!
- (\*24) For a documentation of the presence of important changes in fertility and nuptiality in Belgium during this period see Willems and Wijewickrema (1985) and Willems, Wijewickrema and Lesthaeghe (1981).
- (\*25) The Netherlands, we are informed, is in the process of perfecting a computorised continuous follow up system of registration in such fashion that they look forward to the day in the not too distant future when censuses would be redundant. Such a system of registration would presumably give us what we need.
## Appendix I: Concerning the computation of exposure rates

An exposure rate is defined (cf. footnote nr. 4) in terms of (1) a numerator which - at the level of the country (Belgium) as a whole - is easily obtained from registration data, and (2) a denominator which - for the whole country, once again - is extracted only from census data (given the system of data collection presently operational in Belgium). The computation of the exposure rates necessary for the construction of the main FSL tables (C1, linked to the census of 31-12-70; and C2, linked to the census of 1-3-81) in Series I in the present report thus called for data giving

- the female population as distributed by age, and marital status. This
  was available in published form for both the census of 31-12-1970 and
  that of 1-3-1981.
- 2) the female married population as distributed by parity. This was taken, for the first census, from Tom 7, Tableau II.G,, pp. 33, of "Le Recensement de la Population: 1970" of the Institut National de Statistique (INS). For the secons census, we used the equivalent tables (unpublished) obtained from the INS.

These constituted the requirements for the denominators wanted.

For both C1 and C2 (which cover the periods 1970-71 and 1980-81 respectively), the number of age specific events necessary for the numerator were obtained:

- as the arithmetic means of the corresponding events in 1970 and 1971, in the first case.
- 2) as the arithmetic means of the corresponding events in 1980 and 1981, in the second case. The approximation used in this case did not seem to cause any substantial modification of the rates in question - that at

least was seen to emerge from tests in which we made allowance for the fact that the census did not take place exactly at the end of the year 1980.

## Appendix II: Surviving mothers of surviving cohort members

The problem to be resolved can be formulated as follows. Given the number of survivors aged x (say) of a female cohort under study, how many of them do have their mothers yet alive? With what fraction, in other words, must the given number be multiplied so as to obtain the desired information? The answer to this question is clearly given by the <u>probability</u> of an x year old woman to have a living mother. This probability (following Goodman, Keyfitz and Pullum op. cit.) is obtained in two steps:

1) Step 1. Compute the probability that an x year old woman's mother is still alive given that she (the mother) was a (say) years old when our x year old woman was born. This probability is given - on the assumption that we are dealing with a stable population - by the following expression.

 $(e^{-r(a+h)},L(a),m(a)),(L(x+a)/L(a))$  where h = 1/2

where the symbols used have their standard meaning i.e. m(a) is the fertility rate specific to age a (completed years). L(a) is the life table function giving the number of person years lived

between exact ages a and (a+1). Similarly L(x+a)..... . r is the rate of growth of the implied stable population.

Note (1) that the expression in the first pair of parentheses gives the probability that a new-born child (a girl, in our case) has of being born to a mother aged a in our stable population: and that (2) the expression in the

second pair of parentheses gives the probability that this mother survives till the new-born child reaches the age of x.

· · ·

2) Step 2. Compute the probability we are looking for by summing up the expression obtained last for all values of age a (i.e. age of mother at birth of child).

Thus we have

∑ e-r (**\*+h).m(a).L(x+a)** a

which corresponds to equation 2.1 in Goodman, Keyfitz and Pullum (1974). The reader will find details concerning the computation of the survival of fathers, and parents in Zeng Yi (1986).

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