Demography Special Lecture (8): Marriage and divorce   28th May 2020

Demographic term "nuptiality" refers marriage, separation, divorce, widowhood, remarriage.
Focus of interest is its relationship with age at the beginning and the end of sexual relations, with the formation and dissolution of families and households.

Concepts and data sources
United Nation's recommendation for minimum classification of marital status: single (i.e. never married), married, widowed not remarried, divorced not remarried, remarried.

The measurement of marriage and divorce
Crude Marriage Rate = Marriages/Population x 1000.
General Marriage Rates (females) = Marriages / (Unmarried females aged 15+) x 1000
(Note: Denominator can be all females aged 15+ when the marital status is unavailable or unreliable)
General First Marriage Rate = (Marriages to single females) / (Single females aged 15+) x 1000
Age Specific Marriage Rate (F, 20) = (Marriages to females aged 20) / (Unmarried females aged 20) x 1000
Age Specific First Marriage Rate (F, 20) = (Marriages to single females aged 20) / (Single females aged 20) x 1000.

| (Alternative way of calculation, less popular) |
| ASMR(F, 20) = (Marriage to females aged 20)/(All females aged 20) x 1000 |
| ASFMR(F, 20) = (First marriages to females aged 20) / (All females aged 20) x 1000. |

In this manner, sum of ASFMR forms Total First Marriage Rate, which means the proportion of women who would eventually marry if the age-specific rates prevailed.
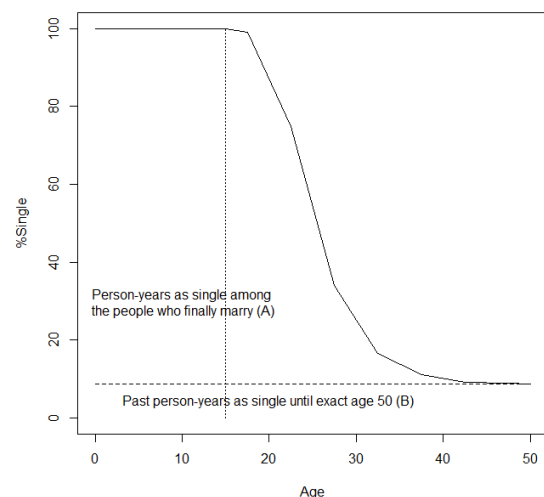https://minato.sip21c.org/demography-special/Chapter8.R

Mean age at marriage and **SMAM (Singulate Mean Age at Marriage)** are informative.
The former requires the data based on marriage registration, the latter does not.

SMAM = {(100x15 + (sum of %single for ages from 15-19 to 45-49) - (mean of %singles of aged 45-49 and aged 50-54)/2 x 50} / {100 -(mean of %singles of aged 45-49 and aged 50-54)}.

* Examples to calculate SMAM from Japanese census data
https://minato.sip21c.org/demography-special/SMAM.R

CRR (Crude Remmariage Rate) = (Females remarrying) / (Divorced and widowed females) x 1000.
ASRR (Age Specific Remarriage Rate) (F, 30) = (Females aged 30 remarrying) / (Widowed and divorced females aged 30) x 1000.
The exercises for this chapter are difficult.
https://minato.sip21c.org/demography-special/Chapter8E.R