Sidebar 1: What is Income Replacement Rate (IRR)?

The Income Replacement Rate (IRR) assesses retirement adequacy by measuring how much of an individual's pre-retirement earnings his retirement income replaces. Net IRR (i.e. after tax and mandatory employee contributions based on pre-retirement earnings at age 55) is used in the study.

$$\text{Net IRR} = \frac{\text{Net Retirement Income}}{\text{Net Pre} - \text{retirement Earnings}}$$

where

- net retirement income is CPF LIFE payout at the CPF drawdown age of 65 and
- net pre-retirement earnings is earnings at age 55 net of personal income taxes and employee CPF contributions. Earning at age 55 is chosen because it is closer to the peak income of the member, which makes it a better gauge of his pre-retirement consumption.

Sidebar 2: What the Study Modelled

The study models the accumulation of CPF savings throughout a member's working life, and uses the CPF savings accumulated (net of withdrawals for housing) to derive his CPF LIFE payouts in retirement. In the model, males enter the workforce at age 25 and females at age 23. They work and save through the CPF consistently till age 65, with some periods of unemployment or economic inactivity (e.g. full-time study) which are factored into the baseline model. They experience wage growth that is faster when they are young and slower (even declining) when they are old. The male member marries at age 30, to a spouse who is aged 28. They buy a Built-to-Order (BTO) flat directly from the HDB that is within their financial means, and jointly finance it using their CPF savings. They accumulate CPF savings as they work, and use all the CPF savings accumulated to purchase a CPF LIFE Plan. The LIFE plan will provide them with a retirement income for life starting from their drawdown age of 65. Assumptions used were generally based on empirical data, to avoid subjective elements.