# Background: The CPF system today protects against longevity risk but not inflation risks

- 1. Our national annuity scheme, CPF LIFE, protects CPF members against longevity risk by providing monthly payouts from the Payout Eligibility Age for life. However, payouts under the two LIFE plans offered today are not designed to increase over time, and hence the purchasing power of the payouts will decrease as members get older.
- 2. The Panel observed from its Focus Group Discussions (FGDs) that many CPF members had concerns that there is currently no option for members who want to protect themselves against increases in the cost of living in their retirement years.

#### Addressing increases in the cost of living in our retirement years

- 3. The Panel understands the concerns of these members over the reduction in purchasing power of payouts from the existing CPF LIFE plans as a result of the rising cost of living. This is especially so in the retirement years where members have little or no working income. Hence, the Panel agrees that it is important that members be given a choice that allows them to address this concern, by providing a CPF LIFE plan which addresses inflation risks over time.
- 4. The Panel considered the possibility of introducing a CPF LIFE plan that was fully indexed to inflation. However, such a plan could end up providing less certainty to members on their future stream of payouts as the quantum of annual increases would fluctuate from year to year. Furthermore, not all members have expenditure patterns that fully track the inflation measure. In addition, during periods of deflation (i.e., the cost of living going down), CPF LIFE payouts that are fully indexed to inflation would have to fall in nominal terms, which may not be acceptable to some members.
- 5. A CPF LIFE plan that is fully indexed to inflation would also be more complex to implement, as it would require a new inflation-indexed asset class to enable CPF Board to hedge against its liabilities of monthly payouts in real terms. On the other hand, a CPF LIFE plan with payouts that escalate at a set nominal rate would be simpler and more feasible to implement.

#### Recommendations

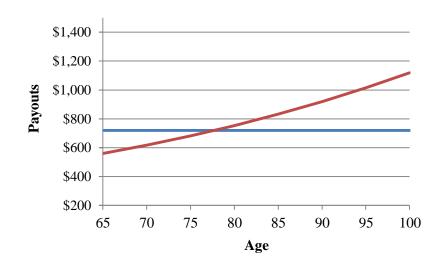
6. Given the above considerations, the Panel felt that a plan with **payouts that increase at a set rate** would be preferred to provide members with certainty over their payouts, while **helping to preserve the purchasing power of their payouts**. For simplicity, the Panel does not recommend introducing more than one escalating plan option. This is to avoid introducing additional complexity to the annuity scheme.

#### **Recommendation 10:**

- An additional CPF LIFE plan should be offered with payouts that increase at a set percentage every year
- 7. The Panel also considered whether this "escalating payout plan" should be mandatory. It noted, however, that public interest in an escalating plan was mixed and participants at our FGDs had varied preferences in payout structures. Not all members felt that they required payouts that increase over time. Some preferred a level payout structure because this gave them greater certainty over their retirement income.
- 8. With the introduction of an additional CPF LIFE plan with escalating payouts, members will have the flexibility to choose different ways to spread out their payouts across their retirement years, be it in the form of level payouts or payouts that escalate at a set percentage every year<sup>1</sup>. The Panel notes that for the same annuity premium and same payout start age, a CPF LIFE plan with payouts that increase at a set rate over time would necessarily have starting payouts that are lower compared to the level, non-escalating CPF LIFE Standard Plan<sup>2</sup> (see Figure 4.1).

<sup>&</sup>lt;sup>1</sup> Conceptually, payouts may not always escalate at the set rate as the underlying payout may be adjusted periodically to reflect actual mortality experience and investment returns. This is no different from the current non-escalating CPF LIFE plans where similar adjustments can also be made to payouts. However, the Panel understands that regardless of the type of CPF LIFE plan, the payouts are designed to be stable as CPF LIFE monies are invested in a portfolio of special Singapore Government bonds that pay fixed coupon rates over a long period of time. This results in a stable interest rate for CPF LIFE monies, and thus a stable payout for CPF LIFE plans. Any adjustments to account for long term changes in interest rates or expected life expectancy are expected to be small and gradual. Correspondingly, a stable underlying payout from the escalating CPF LIFE plan provides for an effective rate of escalation that is in line with the set rate of escalation.

<sup>&</sup>lt;sup>2</sup> Under CPF LIFE, all annuity premiums which are not paid out through monthly annuities are bequeathed to members' loved ones upon death. As a consequence, this also means that the bequest under the CPF LIFE plan with escalating payouts will be higher compared to the level, non-escalating Standard Plan, in the first few years after payouts start.



<u>Figure 4.1: Escalating Payouts versus Level Payouts</u> (for the Same Premium Committed and Same Payout Start Age)

9. In arriving at the annual rate of increase in payouts, the Panel studied historical long term inflation rates (see Figure 4.2 below) using several inflation measures to proxy a rate that could be used to approximate cost of living increases over the long term. The Panel found that that there was no major difference between (i) core inflation, (ii) headline inflation, and (iii) headline inflation excluding owner occupied accommodation over a 20-year and 30-year period, as shown in Figure 4.2.

	Core <sup>3</sup>	Headline	Headline excluding Owner- Occupied Accommodation <sup>4</sup>
10-Yr Average (2006-2015)	2.0%	2.6%	2.3%
20-Yr Average (1996-2015)	1.6%	1.7%	1.6%
30-Yr Average (1986-2015)	1.6%	1.7%	1.7%

Figure 4.2: Different Inflation Measures over the Long Term

10. Therefore, we recommend introducing an additional CPF LIFE plan with payouts that increase at a set 2% per year. We recognise that the long term inflation rate could change in future and the payout escalation rate, and hence payouts, for future cohorts can thus be reviewed periodically to ensure its relevance.

<sup>&</sup>lt;sup>3</sup> Core inflation excludes the costs of private road transportation and accommodation.

<sup>&</sup>lt;sup>4</sup> I.e. Headline inflation excluding the imputed rent on owner-occupied accommodation (OOA).

#### Recommendation 11:

- The rate of increase of payouts should be set at 2% for the escalating CPF LIFE plan
- 11. The starting payout under an escalating payout plan of 2% will be about 20% lower than the payout from the existing Standard (or level) plan, assuming the same amount of premiums committed and the same payout start age for both plans. For those members who are concerned about the lower starting payouts, they can choose to increase their starting payouts via two routes (i) top-up their CPF LIFE premiums further<sup>5</sup>, and/or (ii) delay their payout start age, up to age 70, to permanently increase their payouts for life. These two flexibilities were part of the Panel's recommendations discussed in previous chapters of this report, and can be usefully applied to address concerns of lower starting payouts here.
- 12. With our recommendations, CPF members can now choose from a suite of options and have the flexibility to increase their payouts if they would like to, including picking a CPF LIFE plan with payouts that increase at 2% per year. In summary, members can exercise a combination of options to achieve their desired payouts, and this is outlined in the hypothetical illustrations overleaf.

<sup>&</sup>lt;sup>5</sup> Since Jan 2016, CPF members aged 55 and above can top-up their Retirement Accounts up to the Enhanced Retirement Sum (ERS) using cash/CPF savings. The ERS is set at 3 times of the Basic Retirement Sum.

### Hypothetical illustrations

- 13. Mr De Souza and Mr Eng both turn 55 in 2016 and each set aside their Basic Retirement Sum of \$80,500 in their individual Retirement Accounts. By the time they reach their Payout Eligibility Age (age 65), the sum of \$80,500 in each account would have grown to \$127,000 because of the interest received from CPF<sup>6</sup>.
- 14. Mr De Souza decides to commit all the monies in his Retirement Account to CPF LIFE, and selects the CPF LIFE Standard Plan. He will receive a payout of about <u>\$720</u> per month from age 65, for the rest of his life.
- 15. Mr Eng decides to also commit all the monies in his Retirement Account to CPF LIFE, and selects the escalating CPF LIFE Plan. **He will receive a starting payout of about <u>\$560</u> per month from age 65, which escalates at 2% per year for the rest of his life<sup>7</sup>. By age 75, his payout will have risen to about \$680 per month and by age 87, it will have risen to about \$860 per month. This is illustrated in Figure 4.3.**
- 16. To receive the same starting payout as Mr De Souza (i.e. \$720 per month), Mr Eng can opt to either top-up his CPF LIFE premium, and/or delay his payout start age to permanently increase his payout for life.
  - a. If Mr Eng tops-up his CPF LIFE premium by \$39,000 at age 65<sup>8</sup>, his starting payout will be about \$720 per month at age 65, which then escalates at 2% per year for the rest of his life<sup>9</sup>. By age 75, his payout will be about \$880 per month and by age 87, it will have risen to about \$1,110 per month. This is illustrated in Figure 4.4.
  - b. If Mr Eng does not wish to top-up his CPF LIFE premiums, he can defer his payout start age to receive the same starting payout as Mr De Souza. Deferral by 4 years will allow him to receive a starting payout of more than \$720 per month at age 69, which then escalates at 2% per year for the rest of his life. This is illustrated in Figure 4.5.

<sup>&</sup>lt;sup>6</sup> If he continues to work and make contributions to his CPF Plan after age 55, his Retirement Account savings would have increased even more by age 65.

<sup>&</sup>lt;sup>7</sup> Mr Eng's starting payouts are about 20% lower than Mr De Souza's. Due to the escalating nature of the payouts from Mr Eng's CPF LIFE plan, Mr Eng's payouts will be about 20% higher than Mr De Souza's by the time they reach age 87 (about the life expectancy for residents aged 65, based on figures from the Department of Statistics).

<sup>&</sup>lt;sup>8</sup> This is equivalent to Mr Eng topping up his CPF LIFE premium by about \$27,000 at age 55

<sup>&</sup>lt;sup>9</sup> Mr Eng's payouts will be about 50% higher than Mr De Souza's by the time they reach age 85.

## Chapter 4: Option for a CPF LIFE plan with escalating payouts

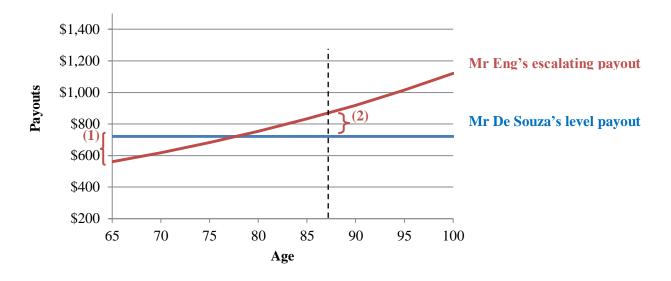
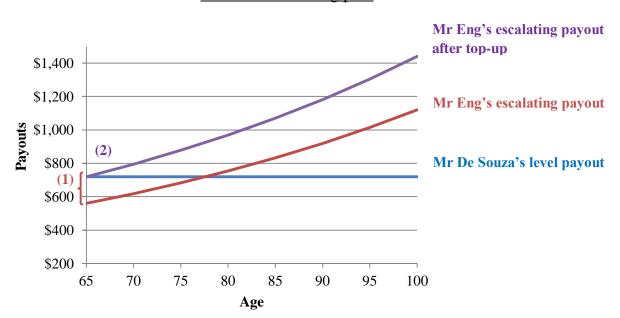


Figure 4.3: Illustrative example of payouts under the escalating plan and non-escalating CPF LIFE Standard Plan

(1) Mr Eng's starting payout is about 20% lower than Mr De Souza's.(2) Mr Eng's payout at age 87 is about 20% higher than Mr De Souza's.

Figure 4.4: Illustrative example of payouts after top-up of CPF LIFE premiums under the escalating plan



- (1) Mr Eng's starting payout is about 20% lower than Mr De Souza's.
- (2) Mr Eng tops-up CPF LIFE premium by about 30% at age 65. His starting payout is now the same as Mr De Souza but his payouts will increase every year.

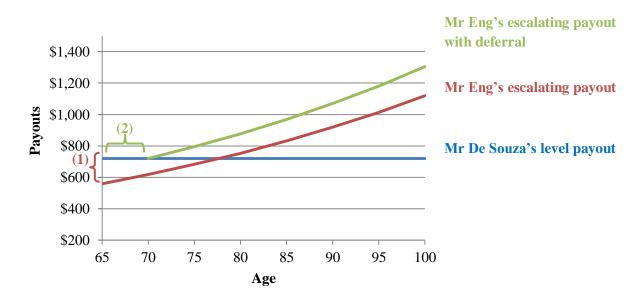


Figure 4.5: Illustrative example of payouts after deferral of payout start age under the escalating plan

- (1) Mr Eng's starting payout is about 20% lower than Mr De Souza's.
- (2) Mr Eng defers his payout start age by about 4 years. His starting payout is now the same as Mr De Souza but his payouts will increase every year.