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# **Expenditure Increases Over the Course**of Retirement

Retirement expenses may rise due to higher needs in aged care and inflation

inflation.



To help Singaporeans better plan for their retirement, we examined how the spending of different groups of Singaporean retirees changed as they aged using longitudinal data from the first three waves (2014-2019) of the Retirement and Health Study.<sup>1</sup>

When planning for retirement, some may assume that their spending does not change much throughout their retirement. Others may believe that they may spend more in the early years

of retirement when they are more active, and less as they age

and engage in fewer activities. However, expenditures may also

rise as they age due to higher needs in aged care as well as

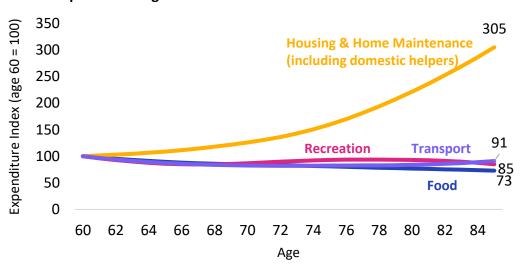
#### Nominal non-healthcare spending rose 3.2% per annum

After adjusting for inflation, we found that spending on food, recreation and transport declined with age. Non-essential aspects of these expenses might have been reduced as one became less active. However, spending on household maintenance increased significantly with age as more hired domestic helpers for household chores as well as other caregiving needs (Figure 1A).

Spending on hiring domestic helpers increased significantly with age



#### Figure 1A: Real Non-healthcare Expenditure Path by Consumption Categories



Non-healthcare expenditure declined initially in retirement before increasing gradually over time



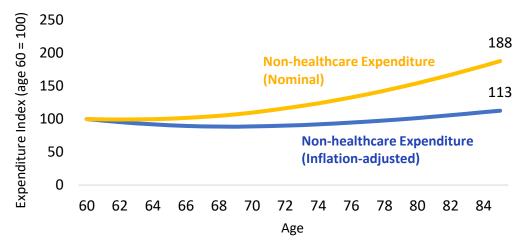
Retirees staying in smaller flats saw greater increases in expenditure



as they aged.

Overall, this resulted in inflation-adjusted non-healthcare expenditure declining slightly in the initial retirement years before gradually increasing (Figure 1B)<sup>2</sup>. We factored in an inflation rate of 2% to have a better sense of how nominal expenditures might evolve. We found that nominal spending increased at a compounded annual growth rate (CAGR) of 3.2% per annum (p.a.) from age 65 to 85.

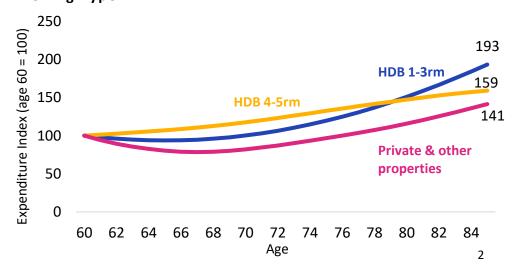
Figure 1B: Nominal and Inflation-adjusted Non-healthcare Expenditure Path



### Retirees staying in smaller flats experienced larger increases in expenditure

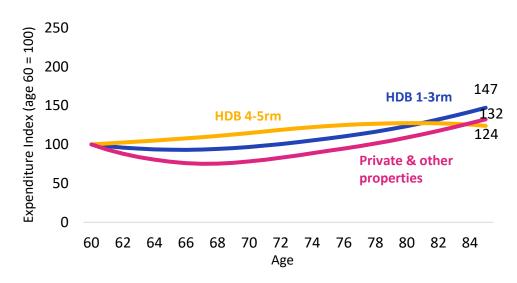
Retirees staying in smaller flats (3-room and below) experienced greater increases in nominal expenditure (3.7% p.a.) than those in larger properties (2.0-2.9% p.a.) (Figure 2A)<sup>3</sup>. Expenditure on domestic helpers was a key driver of this difference. Those in smaller dwellings were more likely to start hiring domestic help in their later years, whereas those in larger properties were more likely to have employed domestic help to begin with.

Figure 2A: Nominal Non-healthcare Expenditure Path by Dwelling Type



When we excluded expenditure on domestic helpers, the differences between the expenditure paths across the different dwelling types was less stark (Figure 2B).

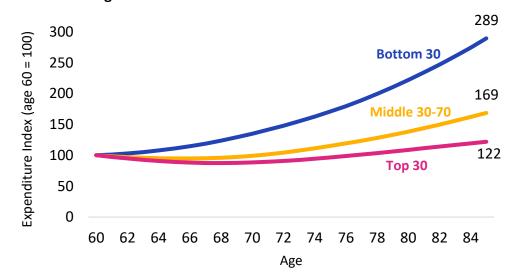
Figure 2B: Nominal Non-healthcare Expenditure (excluding domestic helpers)



## Retirees with lower wealth also experienced higher expenditure increases

Similarly, analysing by retiree's non-housing wealth (e.g. bank savings, CPF balances, etc.)<sup>4</sup>, we found that retirees in the bottom 30 percentiles saw their nominal expenditures increase by 4.9% p.a., compared to 1.6% p.a. for those in the top 30 percentiles. Those in the middle 40% (P30-P70) saw their nominal expenditure grow by 2.9% p.a.

Figure 3: Nominal Non-healthcare Expenditure by Non-Housing Wealth Levels



Retirees in bottom 30 non-housing wealth percentiles had the largest increase in nominal expenditure



It is important to consider rising retirement expenses when planning for retirement



### Factor in the risk of rising expenses when planning for retirement

Our study underscores the need to factor possible rising expenses when planning for retirement, paying particular attention to expenses like domestic help that might increase as they age, on top of inflation.

This is important to consider for those choosing a CPF LIFE plan. CPF LIFE provides monthly payouts no matter how long one lives. When it comes to choosing a suitable CPF LIFE plan, CPF members ought to consider their desired retirement lifestyle and amount of payouts. The CPF LIFE Standard Plan provides level payouts in nominal terms. Assuming 2% annual inflation, the inflation-adjusted Standard Plan payout would be eroded by a third in 20 years. Those worried about meeting rising expenditures in retirement can take up the CPF LIFE Escalating Plan which provides retirement payouts that increase by 2% each year.

#### **Endnotes**

1. Wave 4 (2020-21) was excluded to remove the impact of Covid-19 on expenditure patterns. The sample was also limited to retiree households (households of non-working persons aged 55 years and over). As non-healthcare expenditure was captured at the household-level, the sample was further restricted to 1-2 person households so that results are more representative of individuals.

We focused on non-healthcare spending for two reasons. First, a substantial portion of healthcare expenditure is paid for by insurance and Medisave, rather than out-of-pocket. Second, out-of-pocket healthcare spending patterns may have been heavily impacted by the Pioneer Generation (PG) Package and the enhancement of various healthcare subsidies, making them less representative of future retirees.

Non-healthcare expenditure is collected at the household level. For this study, non-healthcare expenditure items are categorised as follows:

- a. Food (40% of non-healthcare expenditure): food consumed at home, meals taken outside of the home
- b. Housing & Home Maintenance (27%): household maintenance products, furniture & appliances and repairs, conservancy charges/estate management fees, utilities, property tax, housing insurance premiums, domestic helper
- c. Transport (12%): public transport, vehicle purchase, vehicle loan instalments, petrol, parking and ERP fees, road tax, vehicle insurance premiums, vehicle repair & maintenance
- d. Recreation (4%) & Communications (5%): subscriptions for mobile and residential fixed lines, cable TV, internet and other telecom services, entertainment (e.g., movies, sports, gambling), holidays, newspaper and magazines
- e. Others (12%): cigarettes & alcohol, personal maintenance (haircut, toiletries), education & training, computer and other digital equipment, clothing, footwear, etc.

Note: The share of each consumption category out of total non-healthcare expenditure is based on respondents' earliest participated wave.

2. The expenditure paths were produced using a fixed effects panel model, to control for associations between unchanging individual attributes (e.g., race and gender) and expenditure. Log(expenditure) was regressed against a set of dummy variables for each year of age, controlling for household size as well.

Coefficients on the age variables were converted into an expenditure path which was smoothed using locally weighted scatterplot smoothing. As different persons start off with different levels of expenditure, we indexed our findings to 100 at age 60. While respondents aged 55 and above were used in the regression, we present findings from age 60 onwards as most would expect to retire after age 60: for older cohorts, the retirement age was 60, before it was raised to 62 in 1999. This also mitigates the concern that smoothing estimators can be sensitive to endpoints.

It is important to note that spending trajectories of future cohorts may change as they may have different preferences. Furthermore, age effects cannot be completely isolated for year-specific effects, which can also differ for future retirees. They may face different economic, policy, and personal circumstances, or may simply have different retirement lifestyle goals. Thus, some caution should be taken when generalising the results to future retirees.

- 3. The sample was limited to those with no change in dwelling type between waves.
- 4. Non-housing wealth includes private savings, surrender value of whole life/endowment insurance, savings held in Supplementary Retirement Scheme (SRS) account, CPF net balances, value of financial investments etc.