

Planning for a dignified life after retirement

Addressing some of the challenges in planning retirement, **DIVYA MANDLOI, ROHIT SINGH and CLARISSA TURNER** propose a potential solution through their Real Retirement Income Fund and PRI Fund calculator

THE greying population tsunami is weighing on the minds of sovereigns internationally, and Singapore is no exception. Governments are grappling with how to plan and prepare for this dramatic demographic shift, and ensure the well-being of their citizens in retirement.

High-profile failures have seen the slow decline of the defined benefit pension schemes and the transition towards defined contribution plans. However, many questions still arise about how these funds should be invested to ensure long-term security.

Retirement planning is difficult due to its long-term nature and the consequentially high degree of uncertainty. Longevity and inflation are two key risks in planning for your retirement; not knowing how long we will live and the decreasing purchasing power of our money are key retirement planning challenges for the individual.

Understanding and managing the risks associated with life expectancy, inflation and investment rates of return is difficult enough for plan sponsors and the financial industry to grapple with. Thus it is almost impossible for the general public, who often lack the financial literacy necessary to make informed decisions about their retirement saving and investing needs.

The Internet is awash with retirement calculators and planners which attempt to assist the layman in planning for their future, yet they are based on assumptions and advice that are often incorrect, wishful and non-transparent.

In an attempt to address some of these challenges, our team of three MBA students from the NUS Business School has proposed a potential solution. Our Real Retirement Income (RRI) Fund represents a practical and simple implementation of previous research conducted at the Centre for Asset Management Research and Investments (Camri) in their Life-cycle Saving and Investing in Asia Research Series at NUS Business School.

Previous research showed that there is a preponderance of one-size-fits-all lifecycle financial products, such as Balanced Funds, Target Maturity Funds and Lifecycle Funds, which now populate retirement accounts globally.

There is also increasing awareness that this mélange of (risky) equity and bond products do not provide any guarantees, are not necessarily matched to the purpose or

the target date of the account, do not take into account labour supply flexibilities, nor are these products safe, even in the long run.

For a matching strategy, basic building blocks must be denominated in units that match the investor's lifecycle spending profile and consumption needs. There is hence a need to identify and develop a framework that will take an investor's current financial and employment situation into account to project required savings so as to achieve the desired real cash flows in retirement. This can be done either through the purchase of an inflation-protected life annuity at the investor's target retirement date, or through the "laddered" purchase of long-dated inflation-indexed bonds during the investor's saving and investing cycle.

To this end, and with the purpose of providing a social safety net level of living during retirement for all citizens, the RRI Fund is envisaged as a sovereign-managed retirement scheme. It proposes monthly and lump sum contributions from individuals into a laddered portfolio of inflation-protected securities, which in turn ensures a guaranteed, safety-net level of real cash flows from retirement to death that is sufficient to maintain a dignified standard of living.

The payout is benchmarked to the average monthly household consumption expenditure, hence making it "macro consistent". This payout will come in the form of inflation - or consumption-indexed life annuities. In doing so, the RRI Fund manages to remove the two-fold risk of uncertain inflation and longevity, and instead provides payout certainty that enables the average retiree to maintain a dignified standard of living for life.

In order to implement the scheme in a practical and understandable manner for individuals, the team also developed an Excel-based tool to assist the individual in determining how much money they should contribute to the RRI Fund on a monthly basis in their pre-retirement years so as to ensure a certain inflation-indexed payout in retirement.

This amount is a function of a series of inputs keyed in by the individual such as age, sex, marital status and current savings. The RRI Fund calculator's financial engine takes these inputs, and uses a laddered series of current inflation-indexed bonds, to determine how much needs to be saved on a monthly basis until retirement so as to achieve this dignified retirement.

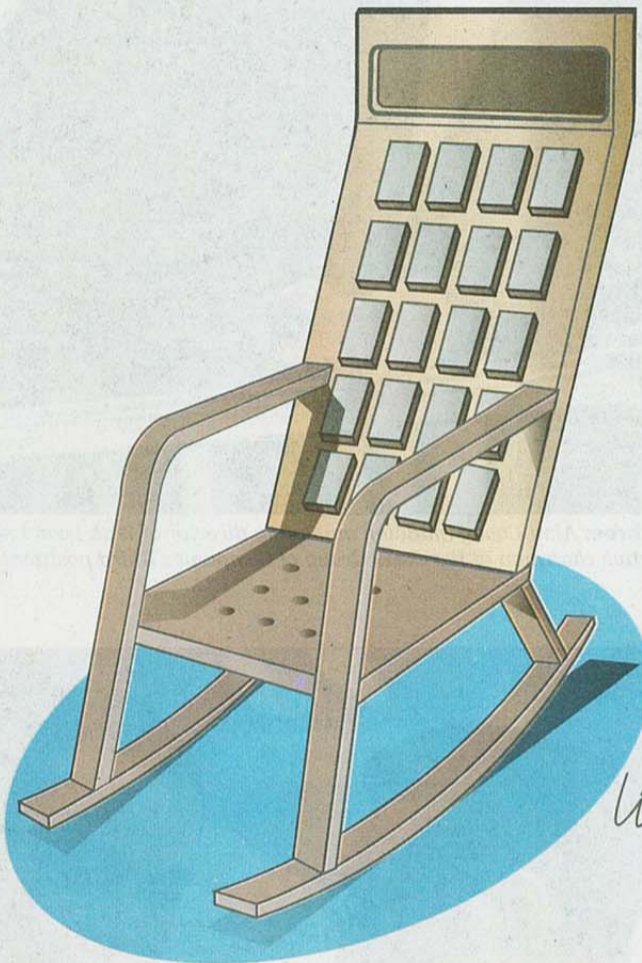


ILLUSTRATION: LUDWIG ILIO

Furthermore, the calculator allows individuals to refine their retirement planning needs according to their circumstances. This includes the option to make lump-sum contributions from current assets such as savings, CPF, and home equity, as well as extending one's retirement age (labour flexibility), and gradually increasing future contributions.

The next question is how much is enough? While internationally the provision of a basic, subsistence standard of living for retirees has been deemed acceptable, in an advanced and prosperous nation such as Singapore, we believe that a dignified standard of living can be achieved.

As a consequence, the RRI Fund calculator uses the current official average expenditure of households over 65 years of age as a basis for the real level monthly income required in retirement for the average two-member household.

The payout to a single member household is set at 70 per cent of the full payout. While this number is

indexed bonds of its major trading partner economies.

That being said, the first best solution always is for the sovereign to issue inflation-indexed bonds outright and create a liquid market that will assist in price discovery. The real retirement income calculator at this stage relies on the US real yield curve as the Singapore real yield proxy given the US is one of Singapore's largest trading partners.

To see how the calculator works, take the example of a 30-year old male married to a 28-year old. The questionnaire asks for age, gender, preferred retirement age and marital status. The tool then estimates the monthly retirement savings required for the household. Given the current real yield curve, the calculator determines that the household needs to save \$459 per month to be able to enjoy a dignified living standard in retirement for life with minimal reliance on the public purse to fund their retirement.

To further refine and tailor one's retirement planning on top of the base estimates, the user can analyse his current financial situation, various assets, retirement age and possible monthly savings to show any shortfall and surplus that will accrue at retirement. It can also illustrate how an individual can reduce her monthly retirement savings by tapping into various other savings and assets, such as savings account balance and home equity, as well as by extending her retirement age, hence avoiding the risk of "saving too much" for retirement.

For a young person who has just recently joined the workforce, it can be difficult to think in any tangible terms about building-up a retirement nest egg. The proposed investment approach of incorporating the expected real returns on savings, longevity risk, and the other aforementioned factors helps reduce the burden of an ageing population on public finances while providing the individual immunity to inflation and other risks.

Sovereign guarantees, as well as the mandated and default retirement savings options explained here, can further reduce the costs associated with such a programme, and hence buttress the efforts towards providing a dignified living standard to Singapore's elderly with minimal reliance on the public purse.

The writers are MBA candidates at NUS Business School, whose research project was sponsored as part of Camri's Life-cycle Saving and Investing in Asia Research Series