



Centre for Asset Management Research & Investments
NUS Business School

Singapore Actuarial Society Health & Retirement Conference

“Avoiding Shock & Owe: How to Retire Well”

13 October 2017

JOSEPH CHERIAN
PRACTICE PROFESSOR OF FINANCE
DIRECTOR, CENTRE FOR ASSET MANAGEMENT RESEARCH &
INVESTMENTS (CAMRI)
NUS BUSINESS SCHOOL

WWW.BSCHOOL.NUS.EDU.SG/CAMRI

The Low-Down Facts on Stocks: Drawdowns

Diversification helps but that does not mean a well-diversified basket of stocks are as safe in the long run. If they were safe in the long-run:

- They wouldn't command an "equity risk premium"
- Warren Buffet would be offering downside insurance on stocks which "premiums" becomes cheaper as your investment horizon increases!

To paraphrase Nobel laureate Robert C. Merton, a goal-oriented approach to retirement planning is warranted, e.g. via an income-focused target date (lifecycle) fund

I.e., getting one's retirement objective function right is paramount

Goal-based Investing

Asset/Liability Management 101

Determining the appropriate objective function (or the “goal”) for any portfolio is important:

- Example 1: Goal is to provide for four years of tuition fees and lodging at a university, beginning when your child is 18 years old
- Example 2: Liability-driven investing (i.e., buy bonds!) with the goal of repaying targeted liabilities (or payouts) according to a schedule, as in a **defined-benefit pension fund?**
- Example 3: A managed **defined-contribution** product where the goal is to receive inflation-protected retirement income for life, adequate to sustain a desired standard of living from the point of retirement, as in an **income-focused, target date fund?**

The Retirement Problem

Let's face it, the average investor is concerned about 3 fundamental issues during retirement:

- Receiving a reasonable, level payout every month
- It should last for as long as the retiree lives
- It should be indexed to his or her cost of living

Myths, Urban Legends and Facts about the CPF

Myth: There's nothing wrong with socking away 36% of your salary in risk-free assets for retirement purposes. In fact, we should be celebrating the fact that Singapore and Malaysia have such mandated social security savings schemes for the longest time ever

Admonition: DO NOT encourage our citizens to dig into their retirement pot (which is meant for expenses and health care needs in retirement) to finance our kids' education and that dream HDB home along the way. These should be run as separate tax-advantaged programs, like in the U.S.

Fact: Home monetization and supplementary retirement schemes already exist within the CPF

Take Away: CPF Life is a good baseline **life annuity** program for all. It should remain the default, worry-free funding program that guarantees Singaporeans a dignified standard of living in retirement

Achieving Retirement Adequacy

Home monetisation schemes to supplement one's retirement income should be for Life.

- Example: HDB's 30-year Lease-Buyback Monetisation Scheme now assures participants housing for Life

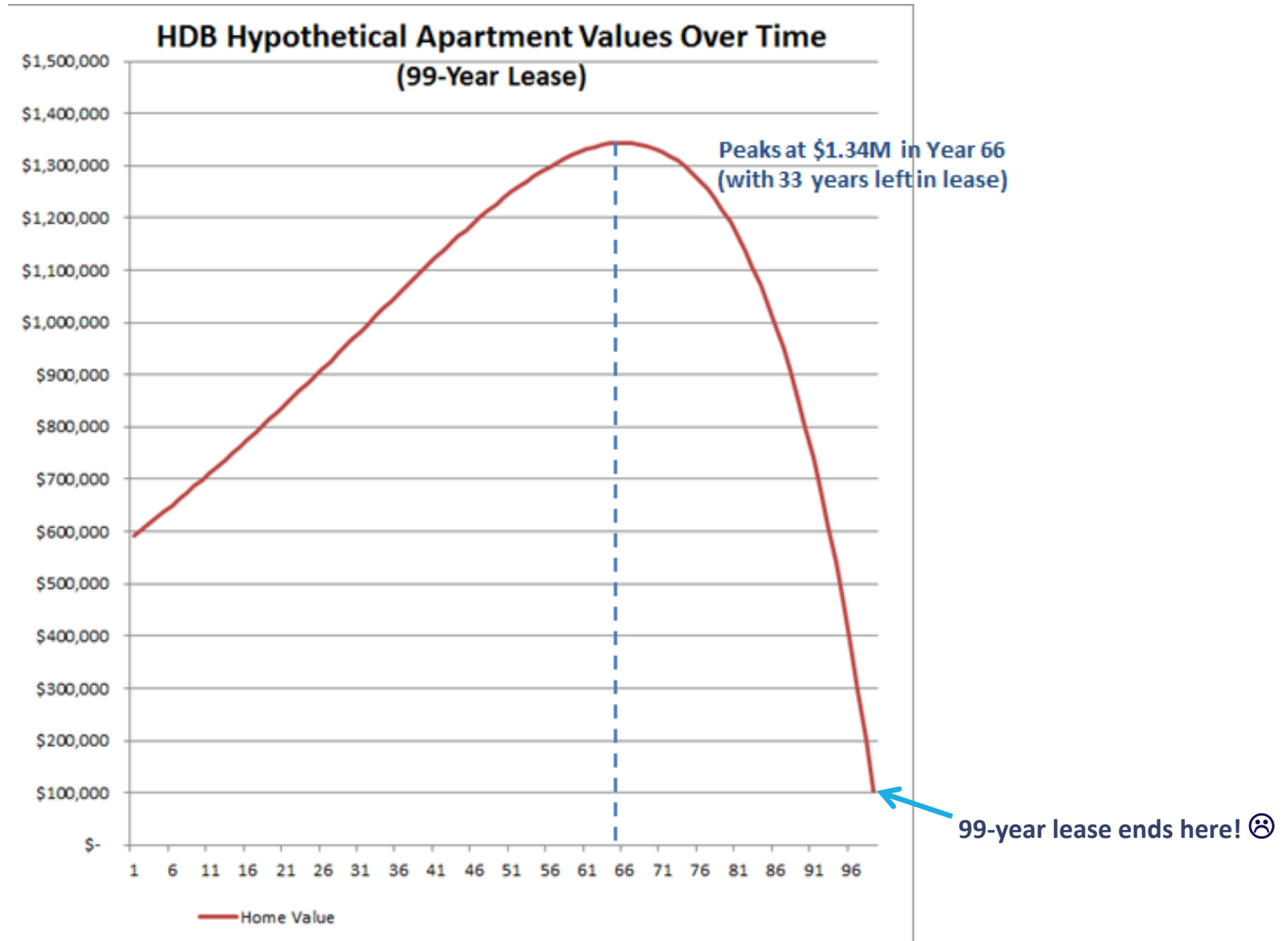
Singapore also has the privately-managed **Supplementary Retirement Scheme (SRS)**, where Citizens & SPRs can contribute up to S\$15,300 per annum with tax breaks (up to a cap) plus:

- Investment returns accumulate tax-free
- But only 50% of the withdrawals from the SRS are tax-free at retirement

How about making 100% of SRS withdrawals tax-free, like CPF withdrawals?

Oh, Give Me a Home on The Range... (Beware the Reality)

Source: CAMRI (Simulations based on assumptions made w.r.t. rental income , growth rates, discount rates, etc.)



Taking advantage of Big Data & Analytics

- “Big Data” and advances in data science analytics, artificial intelligence, natural language processing and machine learning can enable asset managers, government funds, regulators and policymakers to gain deeper insights into how people save and invest over their lifecycle, including for retirement
- The value of Big Data does not lie in the data itself, **but where and how it is collected, organized and analyzed to generate useful insights**; it requires a deep understanding of how behavioral finance impacts the way investors think, choose and act
- These insights will in turn facilitate the design and implementation of more customized as well as optimized investment solutions and strategies for investors over their lifecycle, i.e., from their savings phase all the way to their retirement (or dissaving) years
- Policies can also be formulated to help “steer” or “nudge” investors towards making more informed investment solutions

A Tailored, Big Data Solution for Retirement above and beyond the CPF Life?

An *Income-focused Target Date Plan* that has following elements:

- Inflation indexing
- Personalized asset allocation
- Low cost fund management

Integrated online intelligent tool with options on retirement age and income choices:

- Customized asset allocation based on Big Data analytics, individual profiling and “Robo-advised” help
- Inflation-indexed target income payout
- Target retirement date

Need the right low cost provider in fund management to engineer the above customized Income-focused Target Date Plan product

Some Parting Thoughts

Keep messages to the citizenry about their retirement savings, health care, and home monetization programs simple to understand and transparent

Like health care, integrate other forms of life & death insurance into the retirement savings equation

The CPF Enhanced Retirement Sum of \$249,000 yielding S\$1,860 - \$2,000 per month for life via CPF Life is actually a good payout, based on the math, actuarial tables and current discount rates. **The question: Is S\$1,860 - \$2,000 p.m. enough?**

As a consequence, need to come up with some form of low-cost, private sector driven *income-focused, target date funds* via the LRIS or CPFIS programs so as to supplement individual's retirement income over and above the CPF Life scheme^{**}

** LRIS - Lifetime Retirement Investment Scheme. CPFIS - CPF Investment Scheme