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# More Savings-Investment Options Needed in Singapore's Retirement Financing System

## An Internationally Recognised Model of Retirement Finance

Singapore's retirement financing system is an internationally recognised model of retirement security (Hately & Tan, 2003; Ramesh, 2006). The system is anchored by the Central Provident Fund (CPF), a first-pillar, mandatory savings scheme that covers all employed Singaporean residents. Singapore is the highest ranked Asian country in the Melbourne Mercer Global Pension Index 2018, indicating the country has a sound structure for financing retirement income with many good features, but has some areas for improvement (Mercer, 2018).

## Areas for Improvement

Singapore's demographic trajectory reinforces the need for these improvements. Like other developed countries, Singapore is experiencing rapid ageing of its workforce and its population, with one in four Singaporeans projected to be aged 65 years or above by 2030. As recently as 2011, transfers from children still represented the main source of retirement income for Singaporeans aged 55 years or older (Kang et al, 2013).

Save for the introduction in 2016 of a zero-pillar, tax-financed pension for the least well off, Singaporeans rely primarily on a combination of familial transfers and draw-down of their savings to fund their post-retirement consumption. Substantial savings accumulation is undertaken through the build-up of housing equity, in large part funded by withdrawals from the CPF. This creates highly concentrated retirement portfolios where owner-occupied housing represents almost three-quarters of retiree households' net assets, leaving many in an asset-rich, cash-poor situation.

This article will discuss the savings-investment choices available to Singaporeans in planning and preparing to finance their retirement and consider some proposals for expanding the suite of choices in order to enhance Singaporeans' retirement adequacy.

## The CPF Default Option: Extremely Low-Risk with Investment Returns Matching a 60:40 Global Equity-Bond Fund

The default, do-nothing returns receivable by CPF members on their accumulated balances arise from the interest payable by the CPF Board on those balances. These quarterly interest payments are made in turn from interest accrued on Special Singapore Government Securities (SSGS), non-tradeable bonds issued by the government. The returns received by CPF members on their balances are extremely low-risk, as Singapore is one of only nine sovereign nations with the highest credit risk ratings from all three major rating agencies (Moody's, Standard & Poor's and Fitch). In April 2018, Moody's re-affirmed its Aaa credit rating for Singapore, assessing the country's economic strength as Very High, institutional and fiscal strength as Very High (+) and event risk as Very Low (Moody's Investor Service, 2018).

Accumulated balances in CPF Ordinary Accounts (OA)*[1] earn the higher of the legislated minimum interest rate of 2.5% per annum or the three-month av-

erage of major local banks' interest rates. Special, Medisave and Retirement Account*[1] balances earn either the current floor interest rate of 4% per annum or the 12-month average yield on 10-year Singapore Government Securities (10YSGS) plus 1%, whichever is higher.

The computed interest rates for the Ordinary, Special, Medisave and Retirement Accounts are presently below the legislated 2.5% minimum or 4% floor interest rates, and have been so since June 1999. From first January 2008 however, an additional 1% of interest is paid on the first SGD 60,000 of a member's combined balances (up to SGD 20,000 on the OA). The additional 1% interest paid on the OA balance is credited into the member's Special Accounts (SA) or Retirement Accounts in order to improve retirement savings accumulation.

Over and above this extra interest on the first SGD 60,000 of combined balances, an additional 1% interest per annum is paid on the first SGD 30,000 of the combined balances of CPF members aged 55 years and over. Hence, these CPF members can earn up to 6% interest per year on their retirement balances.

The risk to the investment returns earned by CPF members on their accumulated balances has been passed onto the Singapore government in exchange for a low-risk, guaranteed return, with the government in turn pooling CPF members' net contributions with its own surplus funds which are then managed by its investment management agencies. Simulation analysis by Gee et al, 2014 showed that the expected default returns earned by CPF members on their balances are broadly equivalent to that from a 60:40 global equities-bond fund, but without the downside risk associated with that portfolio. In other words, CPF members benefit from a financially efficient investment return-risk profile on their accumulated CPF balances.

## Housing Equity as a Retirement Nest Egg: Low Downside Risks and High Returns in the Past, but Adequate for the Future?

CPF members have accumulated SGD 376.6 billion in their account balances as at end June 2018 (Central Provident Fund, 2018). Cumulatively, SGD 214.4 billion has been withdrawn under the public and private residential properties schemes (to finance home ownership), underpinning household ownership of residential properties worth SGD 942 billion, representing 43.8% of household assets as at June 2018 (Figure 1). This relatively high percentage of household assets held in an illiquid asset class reflects housing's status as Singaporean society's preferred savings mechanism, but it exposes households to significant illiquidity and concentration risk (Gee et al, 2014, Phang & Helble, 2016). Lacking appropriate alternative avenues for inflation-proofing their savings, Singaporeans continue to be motivated to withdraw from their CPF OA balances to purchase housing, on the assumption that they would continue to enjoy high returns from their housing investments (Lum, S.K. in Soon et al, 2014), therefore exposing households to the vagaries of the property cycle.

### Asset-rich, cash-poor

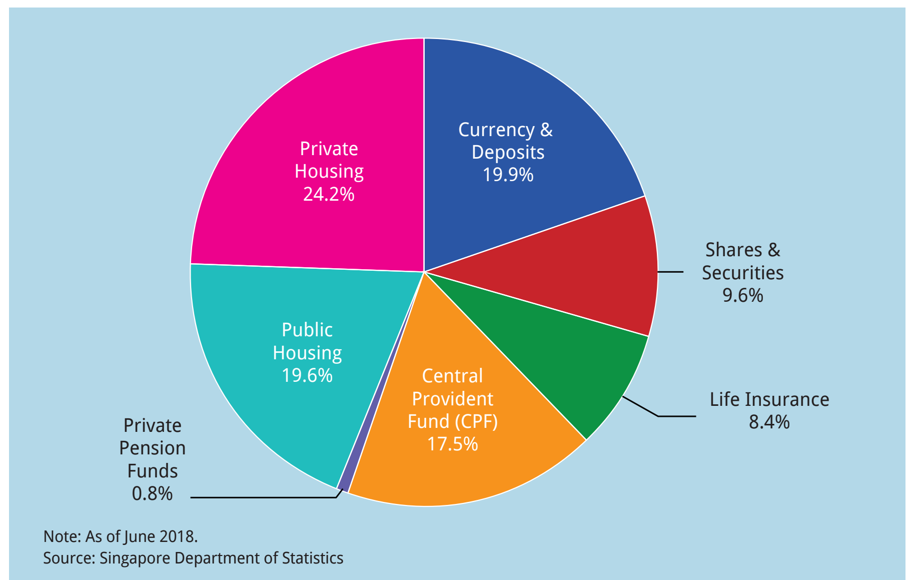
The aggregate picture of household assets likely masks the concentration of housing assets of the median household, as financial assets are more likely to be held by households towards the upper end of the wealth distribution. At the same time, households at or below the median by wealth are likely to have almost 75% of their net assets represented by the home they occupy, particularly those nearing the age of retirement (McCarthy, Mitchell, & Piggott, 2002).

CPF members' use of accumulated OA savings to finance housing has linked the retirement financing system to the property market, and home ownership is seen as another major pillar for retirement security (Ramesh, 2006). Retirees in this system are likely to have accumulated significant housing equity and need not require high income replacement rates on retirement as their housing consumption has already been pre-funded prior to retirement. Research by Chia and Tsui (2012) showed CPF savings were sufficient to generate income replacement rates comparable to Organisation for Economic Co-operation and Development (OECD) countries, on the assumptions that retirees (at the median income level and above) fully annuitise their accumulated CPF savings and that they also make conservative house purchase decisions over their life-course.

### Housing and CPF crowds out alternatives

However, these assumptions may not hold for many households, as evidenced by the low share of private pension assets held by households (Figure 1). The crowding out of the private life annuities market by the CPF Life scheme has been noted by Fong et al. (2011), and researchers have noted the propensity of Singaporean households to over-invest in housing (Ramesh, 2006; Lum, 2011; Phang, 2013 amongst others). Although a combination of CPF savings and housing can provide a basic level of income during retirement especially for retiree households below the median income, those with higher consumption expectations run the risk of their accumulated savings being insufficient to generate the income to support their desired post-retirement lifestyles.

**Figure 1: Singapore Household Sector Assets**




Note: As of June 2018.
Source: Singapore Department of Statistics

# CPF Investment Schemes: Does Doing-It-Yourself Beat the Default?

The CPF Investment Schemes (CPFIS) offers members who are prepared to accept higher risk for higher expected returns a range of specified investment options to boost their retirement savings. Under the CPFIS, CPF members can invest their CPF OA and SA savings above the first SGD 20,000 and SGD 40,000 respectively. As at end June 2018, CPF members had withdrawn and invested SGD 17 billion and SGD 5 billion via the CPFIS-OA and CPFIS-SA respectively (Figure 2).

Approved investments under the CPFIS-OA and CPFIS-SA include a range of unit trusts, investment-linked insurance products, annuities, endowment policies, Singapore government bonds, Treasury Bills, exchange-traded and property funds, shares, corporate bonds and gold. CPF SA monies may not be invested in higher risk products or asset classes such as shares, property funds and corporate bonds.

As at end March 2018, there were 88 unit trusts and 168 investment-linked insurance products (ILPs) included under the CPFIS. The average performance of these 256 unit trusts and ILPs over the last three years was 13.1%, lower than the 22.4% total return from the MSCI World equities (USD) index but above the 5.8% total return from the Citigroup World Global Bond index over the same period (Thomson Reuters Lipper, 2018). The returns achieved in these CPFIS-included unit trusts and ILPs also exceeded the default returns on CPF OA and SA balances over the same period (7.7% and 12.5% respectively).

## CPFIS performance has been mixed

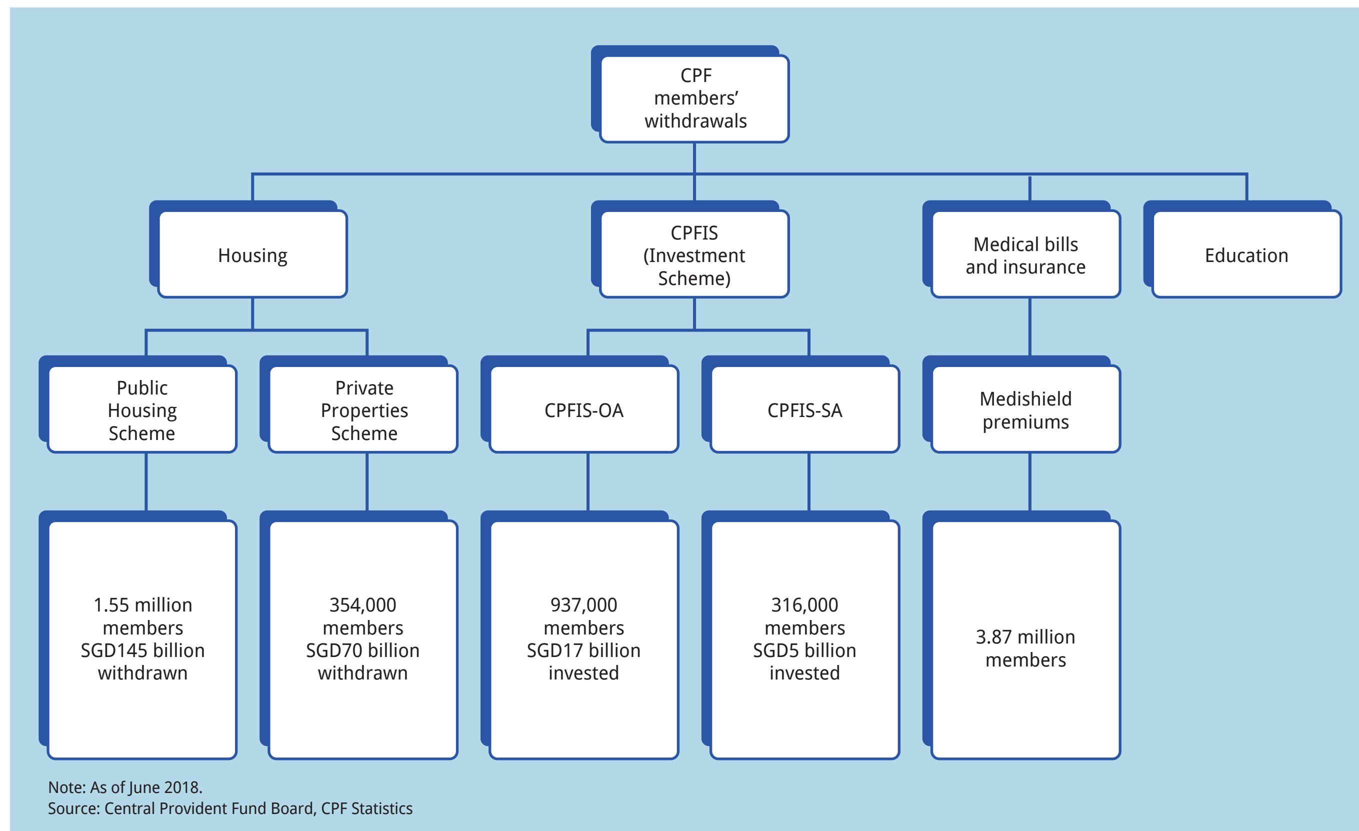
The longer-term performance of CPFIS investors since the inception of the schemes in 1986 has however been mixed. Many CPF members investing their savings in CPFIS have experienced sub-optimal risk-adjusted returns (Koh et al, 2008). Approximately 84% of CPFIS-OA investors who realised their investments in the 12 months to March 2015 would have been financially better off if they had left their savings in their CPF OA to earn the default 2.5% CPF interest rate (CPF Advisory Panel, 2016).

The CPF Advisory Panel convened in 2014 noted that the CPFIS investors' mixed investment return experience might be attributable in part to high costs, as CPFIS products are marketed in the retail channel and do not enjoy economies of scale (CPF Advisory Panel, 2016). Sales commissions of up to 3% are charged, whilst annual fees may be as high as 1.75% for some of the funds. Furthermore, members may lack sufficient investment decision-making proficiency (or lack the appropriate independent advice) to select, monitor and manage their investments in CPFIS products effectively to match their objectives.

## Singapore's retirement savings increasingly invested in the default option, though

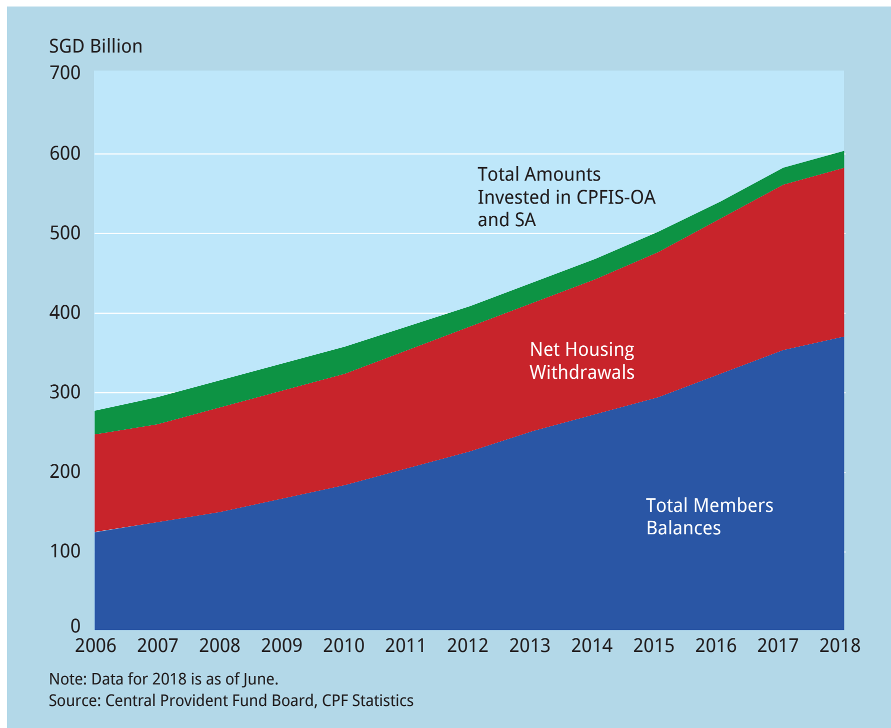
Given both the need to rebalance Singaporean household savings away from housing and the mixed historical investment returns experience of CPFIS investors, it is perhaps unsurprising that the amount of Singapore's retirement savings being withdrawn for investment either

**Figure 2: CPF Withdrawals and Investment Schemes**




Note: As of June 2018.
Source: Central Provident Fund Board, CPF Statistics

**Figure 3: CPF Members' Balances, Amounts Withdrawn and Invested in Housing and CPFIS-OA and SA**




Note: Data for 2018 is as of June.
Source: Central Provident Fund Board, CPF Statistics

in housing or via CPFIS has been steadily declining. Figure 3 shows that between 2006 and June 2018, net withdrawals from the CPF under both the Public Housing and the Private Properties Schemes have declined from 99% of CPF members' balances to 57%. The total amounts invested in CPFIS-OA and SA schemes represented 25% of CPF members' remaining balances in December 2006, but this percentage has since dipped to just 6% as at end June 2018. Not only has the relative proportion of Singapore's retirement savings being deployed in CPFIS products declined, but the absolute amount has also dropped from SGD 31.4 billion in 2006 to SGD 22.6 billion at end June 2018.

There is scope for diversification of Singapore's retirement savings. As Figure 1 shows, almost a fifth of household assets (amounting to SGD 430 billion, 96% of nominal GDP in 2017) resides in extremely low-yielding cash and deposits. The high allocation to very low risk asset classes with likely negative real returns such as cash and deposits may counteract the concentration and illiquidity risks inherent in households' housing exposure. This however increases the chance that Singaporean retirees outlive their savings because those savings are not working as hard to generate the requisite returns to preserve real purchasing power over time.

## Supplementary Retirement Scheme and Section 5 Schemes: Some Alternatives Already in Place

There are two other existing avenues for voluntary saving either on an individual or collective basis. Since 2001, individuals can voluntarily fund their retirement savings via the Supplementary Retirement Scheme (SRS), a tax-advantaged retirement savings account made via one of three SRS providers. Savings into an SRS account of up to SGD 15,300 per annum for Singaporean citizens and permanent residents (SGD 35,700 per annum for foreigners) can be made and are tax-deductible for both employee and employer contributions to that account. SRS accounts can be used to invest in a range of financial instruments including shares, bonds, fixed deposits, some insurance products, unit trusts and annuities. No taxes are payable on investment returns earned during the accumulation phase.

Withdrawals from SRS accounts are treated as income, and are taxable at the individual's marginal tax rate at the time of withdrawal. Early withdrawals (before the individual has reached the statutory retirement age, currently 62 years or on medical grounds) will attract a 5% penalty in addition. However income taxes are levied only on half the withdrawals made after attaining the statutory retirement age (or retirement on medical grounds), and withdrawals can be spread over a maximum of 10 years to further mitigate the tax liability.

### Some tax benefits to these in-place alternatives

Employer-funded pension schemes established under Section 5 of the Income Tax Act (Section 5 plans) are another mechanism for establishing retirement savings. Introduced in 1994, these Section 5 plans are collective savings vehicles that could be used to supplement retirement savings. These plans may be established on either a defined benefit basis (where the final benefits are usually based on the employee's salary and length of service) or defined contribution (where the benefits are dependent on the accumulation of contributions made and the investment returns therefrom). The plans are not subject to any investment restrictions, although the plan trustees are subject to fiduciary duties of care. However, Section 5 plans may only be funded by employer contributions, and employee contributions are not permitted.

Like SRS, Section 5 plans are also tax-advantaged. Employer contributions are tax deductible for the employer, but are not considered a taxable benefit-in-kind for employees. During the accumulation phase of the plans, no tax is levied on investment returns and as with SRS, retirement benefits are taxable in the hands of the employees although the tax may be offset by spreading out withdrawals over up to five years (in contrast to SRS's maximum withdrawal period of 10 years).

### Limited appeal of alternative schemes

Both SRS and Section 5 plans are not very well utilised. The main attraction of SRS plans is their tax deferral feature, but the tax benefits may be of lower appeal to younger or lower wage workers who might be subject to low marginal tax rates anyway, and who might prefer additional disposable income in the near-term (for instance to finance their home loans or immediate consumption needs). For Section 5 plans, the critical issue is that employees are not able to contribute to these plans, not even on a voluntary basis.

At the end of 2017, Ministry of Finance data shows 140,695 SRS accounts

have been established with total contributions amounting to SGD 8.15 billion, representing less than 0.7% of household sector financial assets. Furthermore, 34% of the SRS investments were held in very low yielding cash and cash equivalents. Another third is invested in unit trusts and investment-linked insurance products. Kok et al. (2013) estimated that there were only around 20 Section 5 plans in operation in Singapore as of June 2013, and suggested a number of possible methods to make supplementary retirement options a more appealing prospect for employers and employees alike. These included opening up Section 5 plans to employee contributions, amongst other recommendations.

## The Lifetime Retirement Investment Scheme: a New Choice Forthcoming

Whilst many CPF members are prepared to accept higher risk for the prospect of higher investment returns from their CPF balances, the CPF Advisory Panel in 2016 noted that "many members were not sufficiently confident of making active investment decisions or navigating the wide range of investment offerings" under the currently established Investment Schemes.

Recognising the limitations of existing savings-investment options in enhancing Singaporeans' retirement security, the CPF Advisory Panel report (CPF Advisory Panel, 2016) proposed some recommendations to review and overhaul the investment options in the CPF. The Panel noted that existing options such as the CPFIS were not designed to meet the needs of CPF members who wish to take on higher investment risk for higher returns, but feel that they lack the financial expertise and/or time and resources to manage their investments actively. The Panel termed these CPF members the "simplify investment choices for me" members.

As such, the Panel recommended that the government:

- review the CPFIS to better target the scheme at knowledgeable CPF members who feel confident of managing their investments on their own, and also have the time to do so; and
- introduce a new investment option better suited to those "simplify investment choices for me" CPF members. This new investment option was to be called the Lifetime Retirement Investment Scheme (LRIS).

**Simple, passively managed and low-cost**

The LRIS would have the following features:

- The LRIS would provide a small number of well-diversified funds among which CPF members could choose. The funds would not require members to actively rebalance their portfolios and facilitate a long-term investment perspective, for example adopting a life-cycle investment approach.
- The cost of investing in the LRIS would be kept as low as possible to enhance returns. Fees charged by the LRIS funds could be lowered if the savings via LRIS were pooled to purchase investments in bulk to achieve economies of scale.
- Funds offered under the LRIS would be passively managed to further increase cost savings.

Although there has been little more made known about the LRIS since it was first proposed in August 2016, market commentators have lauded the scheme's features and potential simplicity (Ho, 2016 and Fong and Koh, 2018), suggesting the scheme would be an improvement to the current CPFIS. In particular, the LRIS would enable CPF members to invest in life-cycle funds that are passively but professionally managed at low cost that rebalance portfolios dynamically and automatically as CPF members advance in age (Fong and Koh, 2018).

## Other Needed Advances in Singapore's Retirement Financing Eco-System

Although the forthcoming introduction of the LRIS should enhance the options available to CPF members to invest their retirement savings, there are a number of other aspects of Singapore's retirement financing system that still need improvement. Possible initiatives to consider:

1. The development of an independent investment advisory eco-system that can tailor appropriate financial plans for each individual wishing to invest their retirement savings. These financial advisors would greatly assist that "simplify investment choices for me" group of Singaporeans identified by the CPF Advisory Panel to structure their retirement savings plans more effectively.
2. The expansion of the supplementary retirement savings options in Singapore following the principles underpinning the LRIS (simple to understand, low-cost, passively but professionally managed schemes that automatically rebalance portfolios of investors on a life-cycle basis).
3. The establishment of retirement schemes that better integrate the three main financial pillars of Singaporeans' retirement security: (a) housing equity, (b) CPF retirement account balances and (c) other financial assets. This will allow Singaporeans to avoid over-concentration of their retirement portfolios especially in illiquid housing assets or low-risk, low-yielding cash and deposits.

With the enhancements suggested above, an already effective retirement financing system might be improved further to provide greater financial security for Singaporeans in retirement. Such improvements will be especially important for younger generations who may not have the benefit of the rapid asset accumulation enjoyed by earlier generations, and also lead to greater breadth and depth in Singapore's capital markets.

## Notes

*1 CPF contributions are made into each member's individual account held with the CPF Board. Each member has up to four separate accounts: an Ordinary Account, which may be used for housing, insurance, investment and education; a Special Account, used for financing old-age expenditures and investment in retirement-related financial products; a MediSave Account for hospitalisation expenses and approved medical insurance and a Retirement Ac-

count which is created automatically when a member reaches 55 years of age.

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Christopher's current research focus is on the policy implications of longevity, inter-generational accounts and transfers and the "second demographic dividend". He co-wrote IPS Working Papers No. 24 — The Investment Risks in Singapore's Retirement Financing System, December 2014 and has published several pieces on strengthening old age income support and managing healthcare costs for an ageing population. He is the country team leader for Singapore's National Transfer Accounts project, a framework for understanding the generational economy and how population growth and changing population age structure influence economic growth, gender and generational equity, and public finances.