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Singapore's Central Provident Fund

A National Policy of Life-long Asset Accounts

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ASSET BUILDING PROGRAM

In recent years, policymakers around the world have been attracted to the concept of integrating a consideration of assets into policy efforts aimed at securing and enhancing social welfare. The theory behind asset-based welfare policy suggests that while income facilitates immediate consumption, social development over the long-term occurs primarily through asset accumulation and investment (Sherraden, 1988, 1991). Assets may not only provide individuals with the ability to exert control over resources that can increase their financial security, they might also orient owners to future aspirations and be linked with positive economic, psychological, and social effects. To explore policy efforts consistent with this theory, Sherraden (1991) proposed the establishment of life-long asset accounts for each individual, preferably for newborns, as a vehicle to implement asset-based welfare policies. He further suggests that asset-based policy should be inclusive, progressive, and built around a single integrative and coherent framework (2003a).

The experience of Singapore provides an instructive case study for the potential of this approach. This affluent city-state in Southeast Asia has developed an innovative and comprehensive set of policies that employs an asset-based approach to social welfare (Asher & Nandy, 2006). At the center of these efforts is Singapore's Central Provident Fund (CPF). The CPF has gained international recognition as a particular model for meeting social policy objectives (Hateley & Tan, 2003). As one of the key pillars of Singapore's social safety net (Central Provident Fund Board, 2007b), the CPF seeks to facilitate retirement security while minimizing welfare transfer payments in a manner consistent with a national philosophy of self reliance (Central Provident Fund Board, n.d.-e).

While Singapore became independent in 1965, the CPF was originally established by the British colonial government in 1955 as a compulsory defined-contribution savings scheme. It was designed to provide financial security for workers after retirement or when they were no longer able to work (Asher, 1991). However, over the years, the CPF has been used to accelerate national economic growth (Central Provident Fund Board, n.d.-e) and has since evolved into a comprehensive social security savings plan with various pre-retirement uses such as financing healthcare, post-secondary education, home ownership, and other asset enhancement investments. Furthermore, the CPF is an integral part of the continuum of asset-based policies in Singapore that extend throughout the life course (Loke & Sherraden, 2009). Policies such as the Children Development Accounts (CDAs) that target children from birth to age six, the Edusave Scheme that benefits school-going children, and the Post-Secondary Education Accounts (PSEAs) are fully integrated with the infrastructure of the CPF. Unused balances in the CDAs and the Edusave Accounts are rolled-over to the PSEAs, which in turn transfers its unused balances to the CPF. With a portfolio of continuous managed investment, the CPF has become a life-long provision (Aw & Low, 1996).

There is much to be learned from the Singapore and CPF experience. Especially for other countries considering how to organize social policy efforts to support savings, promote asset-based welfare, and design a lifelong and multi-purpose yet coherent system. This paper will present an overview of CPF, describe how distributions from the fund support a range of policy objectives throughout the life course, and then discuss implications of these findings for national policy efforts in other countries, such as the United States.

Overview of Singapore's Central Provident Fund

Singapore's Central Provident Fund (CPF) is a fully funded comprehensive social security savings plan that can be leveraged to support a range of pre-retirement asset building purposes. Even though it was originally intended to provide Singaporeans a secure retirement, the overall scope and benefits of the CPF now extend to encompass healthcare, homeownership, family protection, and asset enhancement (Central Provident Fund Board, n.d.-g). This section will provide an overview of the CPF, how the Fund is governed and managed, as well as how the accounts are organized and structured.

Governance

The Central Provident Fund Board is established by statute and operates under the purview of the Ministry of Manpower. Board members are appointed by the Minister of Manpower, and include representatives of government, employers, employees, and professionals. The board has responsibility for executing routine administrative matters, but makes no policy or investment decisions. Investment of CPF balances is the primary responsibility of the Government of Singapore Investment Corporation (GIC), which is a private limited company wholly owned by the government (Asher & Newman, 2001).

Portfolio Management of the Central Provident Fund

For monies that are maintained in the CPF accounts, the CPF Board manages the savings on members' behalf. Since 1967, all new long-term investments of the Board have been in Singapore government securities or Advance Deposits (Lim, et al., 1986). This in effect lends members' savings to the Government, which in turn, makes the actual investment decisions (Asher & Newman, 2001). The government securities are special issues of floating rate bonds issued specifically to the Board to meet its interest and other obligations. The interest rates are pegged to the rates at which the Board pays interests to its members (Central Provident Fund Board, 2007b). The Advanced Deposits are deposits placed with the Accountant-General through the Monetary Authority of Singapore to purchase special issues of Singapore government securities and to meet members' withdrawal requirements. The interest rate for Advance Deposits is similarly pegged to the rate at which the Board pays interest for the Ordinary Account, which is one of the primary accounts that workers contribute to on a monthly basis. With the Board's long-term assets held mainly in Singapore government securities that are virtually default free, members' savings are protected against capital risks (Lim, et al., 1986).

Liquidity of the CPF can be measured using both stock and flow concepts. Using the stock concept, liquidity could be measured as the ratio of current assets (in the form of bank deposits and 12-month government bonds) to total assets. Lim et al. (1986) notes that this ratio is small because the liabilities of the CPF are not particularly liquid as most members' account cannot be withdrawn on demand. The flow analysis would, however, provide a better picture of the Fund's liquidity position (1986). The Fund is deemed liquid when the net inflow of funds from contributions, interest income and income from other sources exceed the net outflow of funds due to withdrawals and other expenses. For the year ended December 31, 2006, the Board had a net inflow of over S$7 billion[1] to the Fund (Central Provident Fund Board, 2007b).

Members and Contributions

Every month, employers and their employees make contributions to the CPF. CPF contributions are payable by employers for employees earning more than S$50 per month. For employees earning more than S$500 per month, both employers and employees are required to contribute to the employees' CPF accounts. As of March 2008, there are 3.19 million members with positive balances amounting to some S$140 billion in the CPF accounts (Central Provident Fund Board, 2008c). When regrossed to include withdrawals for housing, investments and other purposes, CPF balances amounted to S$297 billion as at December 2007 (Central Provident Fund Board, 2008e). In the first quarter of 2008, about S$5.9 billion was received and credited in the CPF, while S$4 billion was withdrawn by members (Central Provident Fund Board, 2008c).

CPF contributions are payable on wages up to S$4,500 per month. In 2008, contribution rates for employers range from 3.32 percent to 14.5 percent of the employee's total wages, depending on the employee's pay and age. Employees contribute up to 20 percent of their wages to their CPF accounts, again depending on income and age. Older workers, and those earning less than S$1500 per month, attract lower employer CPF contribution rates in order to increase their employability from the lowered wage cost burden on employers. These employees earning less than S$1500 per month also contribute a smaller portion of their pay, if any, towards their CPF accounts so that they would have more to take home each month. The reduction in contributions for older low-wage workers is offset by income supplements from the government under the Workfare Income Supplement Scheme. For every dollar in income supplements disbursed as cash to the worker, S$2.50 will be deposited into the worker's CPF account (Central Provident Fund Board, n.d.-k). Appendix 1 lists the contribution rates by wage and age.

CPF contributions up to the CPF Annual Limit (S$26,393 in 2008), and earnings from interest or investments, are tax exempt at the point of contribution and distribution. Self-employed persons with annual net trade incomes of S$6,000 and above are required to make contributions into their Medisave Accounts, one of the four CPF accounts. Voluntary contributions into the CPF accounts up to the CPF Annual Limit amount are also permitted for the self-employed and for employees who have not yet reached the CPF Annual Limit. Contributions in excess of the CPF Annual Limit will be refunded without interest.

The CPF Account Structure

CPF savings are maintained in four accounts: the Ordinary Account (OA), Special Account (SA), Medisave Account (MA) and the Retirement Account (RA). Savings in the OA can be tapped for pre-retirement purposes, such as to pay for home insurance premiums, or borrowed against for home purchase, or for investment and education purposes. The SA maintains savings that are set aside for retirement, and can be used for investment in retirement-related financial products, and for contingency purposes. Savings in the MA can be used for qualified medical expenses and medical insurance premiums.

Table 1. CPF Contribution Rates and Allocation Among Accounts (for employees earning more than S$1,500 per month up to a wage ceiling of S$4,500 per month)

Employee Age (years)	Contribution By Employer (percent of wage)	Contribution By Employee (percent of wage)	Total Contribution (percent of wage)	Credited Into		
				Ordinary Account (Ratio of Contribution)	Special Account (Ratio of Contribution)	Medisave Account (Ratio of Contribution)
35 & below	14.5	20	34.5	0.6667	0.1449	0.1884
Above 35 - 45	14.5	20	34.5	0.6088	0.1739	0.2173
Above 45 - 50	14.5	20	34.5	0.5509	0.2028	0.2463
Above 50 - 55	10.5	18	28.5	0.4562	0.2456	0.2982
Above 55 - 60	7.5	12.5	20	0.575	0	0.425
Above 60 - 65	5	7.5	12.5	0.28	0	0.72
Above 65	5	5	10	0.1	0	0.9

Source: Central Provident Fund Board (2008).

When a CPF member reaches age 55, the legislated draw-down age for CPF savings, the member will transfer to prevailing CPF Minimum Sum amount from their OA and SA into their Retirement Account. Members with combined savings in the OA and SA above the CPF Minimum Sum have the option of withdrawing excess savings from the OA and SA. The CPF Minimum Sum held in the RA can be used to purchase a life annuity, invested in a fixed-interest account with a participating bank, or left with the CPF Board to earn interest. Savings in the RA will be disbursed in monthly payouts to the member over about 20 years from age 62 until the savings are exhausted. The CPF Minimum Sum is set at S$106,000 for 1 July 2008, up to half of which could be pledged in the form of property. There is also a Medisave Minimum Sum (S$29,500 for 2008) that needs to be maintained in the Medisave account, savings above which could be drawn down at age 55. The CPF Minimum Sum and the Medisave Minimum Sum are adjusted for inflation each year.

The distribution of CPF contributions into the various accounts depends on the age of the member. Table 1 details the contribution rates and the allocation of the contributions into the various accounts for employees earning monthly wages of S$1,500 or more. Allocation to the SA and MA gradually increases with age as healthcare and retirement demands are likely to increase as one grows older. For members who have reached for Medisave Contribution Ceiling, Medisave contributions in excess of the Medisave Contribution Ceiling will be transferred to the SA for members age below 55, and into the RA for members aged 55 and above. The Medisave Contribution Ceiling is the maximum amount a member is required to contribute and maintain in his/her MA. As of July 2008, this ceiling has been set at S$34,500.

CPF Interest Rates

CPF members earn interests on their CPF balances. The interest rate for the Ordinary Account is computed quarterly and is pegged to market interest rates. This rate is the weighted average of the 12-month fixed deposit rate (80 percent) and the average savings rate (20 percent) published by the major local banks, subject to a guaranteed minimum of 2.5 percent. And from 2008, the interest rate for the Special Account, Medisave Account, and Retirement Account is pegged to the 12-month average yield of the 10-year Singapore Government Securities plus 1 percent, subject to a minimum of 4 percent for the years 2008 and 2009. In addition, the first S$60,000 of a member's combined CPF balance, with up to S$20,000 from the OA, will earn an extra 1 percent interest. The extra interest earned on the OA funds will be paid into either the SA, or RA if the member is 55 years or older (Central Provident Fund Board, n.d.-b).

Distribution of Savings from the Central Provident Fund

With the evolution of the CPF, distributions of savings are allowed to support a range of objectives across the life course. The two characteristics of the CPF which make it a national policy of life-long asset accounts are the diversity of uses and the extended period of account ownership. This section will describe how members access their accounts to support both retirement and pre-retirement objectives.

Securing Members' Retirement

The CPF was originally set up to provide financial security for Singaporeans in their retirement. When CPF members reach age 55, they may withdraw their CPF savings in the Ordinary and Special Accounts. However, to ensure that members set aside sufficient savings to support a basic standard of living and to meet their healthcare needs during retirement, members may only withdraw from their Ordinary and Special Account savings after setting aside the CPF Minimum Sum and the Medisave Required Amount. Members with Medisave savings in excess of the Medisave Minimum Sum may also withdraw the excess savings from their Medisave Accounts. Those who continue to work and contribute to the CPF after age 55 may withdraw their CPF savings annually on their birthday or after they have stopped working for six months. Withdrawals are allowed only after setting aside the required minimum sums for the Medisave and Retirement Accounts.

Under the CPF Minimum Sum Scheme that was implemented in 1987, members are required to set aside the prevailing CPF Minimum Sum in their Retirement Accounts at age 55 by transferring savings from their Ordinary and Special Accounts into their Retirement Accounts. Savings in excess of the CPF Minimum Sum may be withdrawn at that point. The CPF Minimum Sum is set at S$106,000 in 2008, and it will gradually increase to S$120,000 (in 2003 dollars) in 2013. Thereafter, the CPF Minimum Sum will be adjusted for inflation each year. The CPF Minimum Sum could be set aside entirely in cash, or if CPF monies have been used to purchase properties, such properties may be pledged for up to 50 percent of the Minimum Sum.

To ensure adequate savings for medical expenses in retirement, members are also required to set aside the Medisave Minimum Sum, set at S$29,500 in 2008 and adjusted for inflation every July, or at the very minimum, the

Medisave Required Amount (MRA). The MRA is set at S$14,000 from January 1, 2008, and will rise by S$2,500 each year until it reaches S$25,000 (in 2003 dollars) in 2013. Upon reaching age 55, members who have Medisave savings below the MRA would be required to transfer monies from their Ordinary and Special Accounts into their Medisave Accounts to meet the MRA and the CPF Minimum Sum, before they are able to make withdrawals from their Ordinary and Special Accounts. Withdrawals from the Medisave Accounts are allowed if the Medisave Minimum Sum has been set aside.

With the CPF Minimum Sum set aside in the Retirement Account, members are encouraged to purchase annuities to ensure a guaranteed income for the life of that annuity. Alternatively, members could have the funds deposited in a fixed interest account at a participating bank and receive a monthly income until the Retirement Account is exhausted. Members could also have the CPF Minimum Sum retained by the CPF Board for continued investment, and receive a monthly income from the prevailing draw-down age until the funds are exhausted. The draw-down age for the Retirement Account is set at 62 in 2008 and will eventually be increased to 65 for those born after 1954. If a member sets aside the full Minimum Sum of S$106,000 in cash in 2008, the member can expect to receive about S$910 each month from the draw-down age for approximately 20 years until the funds are exhausted (Central Provident Fund Board, 2008a).

With longer life expectancies, many members are expected to outlive their CPF monthly payouts. In line with the principle that CPF members should have incomes for life, CPF LIFE, a new and flexible annuity/insurance scheme to provide lifelong income for members in their retirement, will be implemented in 2013. All members born after 1957, with at least S$40,000 in their Minimum Sum, will automatically be included in the Scheme. Members with less than S$40,000 may opt-in, if they wish to do so, by topping-up their Minimum Sum. Depending on the savings in the Retirement Account, monthly payouts will range from about S$350 at the entry level to S$1,100 for those with the full Minimum Sum. Members have the option of choosing the age where the monthly pay-out begins, and whether the unused premiums are refundable to the estate upon death. The monthly payouts, however, will not be adjusted for inflation (Central Provident Fund Board, 2008g).

Pre-Retirement Uses of CPF Savings

Over the years, the focus of the CPF has evolved from providing for one's retirement into a comprehensive social security savings plan that supports various social welfare functions over the entire life cycle. The CPF is now considered a key pillar in Singapore's social security architecture, encompassing core elements of homeownership, education, asset enhancement, family protection, and healthcare. This section presents the various pre-retirement functions that have made the CPF relevant across the life-span.

Home Ownership. Singapore has a home ownership rate of over 90 percent, and this rate was achieved primarily through the deployment of CPF resources (Hateley & Tan, 2003). CPF members are able to own residential properties with the help of the Public Housing Scheme (PHS) and the Residential Properties Schemes (RPS). These schemes allow savings in the Ordinary Account to be borrowed against to finance the purchase of public and private residential properties respectively, and to repay and service monthly mortgages. Under both schemes, CPF members are allowed to borrow up to 100 percent of the valuation of the property to finance the purchase, or up to 120 percent of valuation if the prevailing Minimum Sum cash component has been set aside (Central Provident Fund Board, 2007b). When the residential properties are sold in the future, the amount that was borrowed from the CPF has to be repaid with interest, back to the CPF account.

However, if the proceeds from the sale are insufficient to repay the loan amount with interest, the shortfall due to the CPF need not be repaid. Subject to the availability of funds in member's CPF account, there is no limit to the number of times CPF funds can be used for property purchases. At the end of 2007, 1.29 million members used their CPF to purchase public housing apartments, up from 2,900 when PHS first started in 1968. In addition, another 226,000 members used their CPF savings to purchase private residential properties. A total of S$5.9 billion was withdrawn from the CPF in 2007 for homeownership purposes (Central Provident Fund Board, 2009).

Investments. Members have the opportunity to invest their CPF savings to enhance their retirement funds under the CPF Investment Scheme (CPFIS) (Central Provident Fund Board, 2007a). Under the CPF Investment Scheme - Ordinary Account (CPFIS-OA), balances above $20,000 in the Ordinary Account may be invested in a variety of vehicles, including: Fixed deposits, annuities, endowment and investment-linked insurance policies, unit trust, exchange traded funds (ETFs), fund management accounts, Singapore government treasury bills, and Singapore government, statutory board and government-guaranteed bonds. In addition, up to 35 percent of investible savings, such as the sum of the Ordinary Account balance and the amount of CPF withdrawn for investment and education, may be invested in shares, property funds or real estate investment trusts and corporate bonds. Up to 10 percent of the investible savings can be invested in gold ETFs and other gold products. Balances above the S$20,000 in the Special Account may also be invested under the CPF Investment Scheme-Special Account (CPFIS-SA). Approved investment options under this scheme are fixed deposits, Singapore treasury bills, annuities, endowment insurance policies, Singapore Government, statutory board and government guaranteed bonds, and selected investment-linked insurance products, unit trusts and ETFs (Central Provident Fund Board, n.d.-a).

As the objective of the CPFIS is to improve the long-term returns on members' CPF savings for retirement, sale proceeds when investments are liquidated, including any profits, will be credited back into the originating CPF accounts. Losses incurred, however, need not be repaid. In addition, sale charges for unit trusts and investment-linked insurance products offered under the CPFIS are capped at 3 percent. Expense ratios for new funds cannot be higher than the median of existing CPFIS funds in their respective risk categories. The interest and profits earned from investments under the CPFIS are also tax exempted. Over 894,000 CPF members have investment accounts opened under the CPFIS-OA as at March 31, 2008, with more than S$27.8 billion invested. Another S$7.9 billion is invested under the CPFIS-SA by more than 550,000 members as at March 31, 2008 (Central Provident Fund Board, 2008c).

Education. Under the CPF Education Scheme. CPF members can borrow funds from their Ordinary Accounts to help finance their children's or their own basic post-secondary education at approved local educational institutions. The lower of either 40 percent of the accumulated OA savings (excluding amounts withdrawn for housing) or the remaining balance after setting aside amounts reserved for housing or other schemes, if any, can be used under this scheme. Repayment of these educational loans back into the CPF accounts, with interest, would need to begin one year after graduation or leaving the course of study. The repayment could be made in one lump sum, or in monthly installments over a maximum period of 12 years (Central Provident Fund Board, n.d.-i). Over 142,000 students have benefited from the Education Scheme as at December 31, 2006, with an average of $7,394 withdrawn per student (Central Provident Fund Board, 2008d). As the CPF savings are intended for the member's retirement needs, students who default on repaying the educational loans under this scheme will face legal actions. As at December 2007, 14 percent of students who have used CPF savings for their studies have defaulted in the repayment of the CPF loan (Central Provident Fund Board, 2008d).

Healthcare. The financing philosophy for Singapore's healthcare delivery system relies on a combination of individual responsibility, community support and government subsidies to keep basic healthcare affordable. To help Singaporeans pay for their medical expenses, the government has put in place a financing framework comprising Medisave, Medishield, Eldershield, and Medifund (Ministry of Health, 2007a), with the Medisave and Medishield falling within the CPF framework.

Medisave was introduced in 1984 as a national healthcare savings scheme where a portion of a member's CPF savings is directed into the Medisave Account. Savings in the Medisave Account could be used to pay for the member's, or his/her immediate family's, qualified medical expenses such as hospitalization, day surgery and certain outpatient treatment expenses. Funds in the Medisave Account could also be used to pay for the premiums of Medishield, Medisave or Approved Private Integrated Plans (Central Provident Fund Board, n.d.-h) provided by private insurers.

The Medishield is an individual, low-cost, basic catastrophic medical insurance scheme managed by the CPF Board (Central Provident Fund Board, 2008f). It is designed to help members pay part of the large medical bills arising from acute medical care or prolonged hospitalizations. Premiums for Medishield start as low as S$30 per year, and the last entry age is 75 years old with coverage extending to age 85. All newborns and school-going children are now automatically offered Medishield coverage on an opt-out basis (Ministry of Health, 2007b).

Eldershield was launched in 2002 by the Ministry of Health as an affordable severe disability insurance scheme which provides basic financial protection to those who need long-term care in retirement. All Singaporeans and Permanent Residents who are CPF members are automatically covered under Eldershield at age 40 unless they opt out of the scheme. Premiums for Eldershield can be made from CPF members' Medisave Accounts (Central Provident Fund Board, n.d.-j).

Other Insurance Schemes. The CPF Board extends two addition insurance schemes to CPF members: the Dependants' Protection Scheme, and the Home Protection Scheme. The Dependants' Protection Scheme (DPS) is an affordable term insurance that provides insured members and their families with a financial buffer should they become permanently incapacitated or deceased. The maximum sum assured under DPS is S$46,000, and annual premiums range from S$36 to S$260. Premiums are automatically deducted from the member's Ordinary Account. The scheme is automatically extended to CPF members who are Singapore citizens or Permanent Residents, between age 16 and 60, when they make their first CPF contribution. Members have the option to opt-out of the scheme at any time. DPS has been privatized since 2005 and is now administered by two private insurers (Central Provident Fund Board, n.d.-c).

The Home Protection Scheme (HPS) is a mortgage reducing insurance which insures CPF members and their families against losing their homes should members become incapacitated or deceased before their housing loans are fully paid up. HPS insures CPF members who purchase their public residential property under the Public Housing Scheme for the term of their loan or up to age 65, whichever is earlier. Members who do not use their CPF savings to pay the monthly housing installments on their public housing property may also opt-in to the scheme. Premiums will be deducted automatically from the Ordinary Account (Central Provident Fund Board, n.d.-f).

Assessing the Policy Implications of the Central Provident Fund Experience

A great deal can be learned from the CPF experience in Singapore, which has gained international recognition and forms the basis of other schemes around the world (Hateley & Tan, 2003). It can also be evaluated from a number of dimensions with implications for the potential delivery and organization of social policy efforts in other national settings, such as the United States.

Domestically, the CPF is well-received by the population. In focus group discussions with various cross sections of the population, Sherraden and his associates found that the "CPF is extremely popular among Singaporeans; the underlying sentiment is an almost bedrock of support" (Sherraden, Nair, Vasoo, Ngiam, & Sherraden, 1995, p. 118). In a separate survey of 356 CPF members, Sherraden et al. (1995) found that respondents viewed the CPF as an effective vehicle for providing housing and healthcare, and they believed it had extremely positive effects on individuals, family life, and on the nation as a whole.

Given its relatively long history and comprehensive nature, the CPF experience can be assessed as a particular manifestation of asset-based welfare policy. Sherraden (2003a) suggests that four core principles of asset building: inclusiveness, progressivity, coherence and integration, and development, should shape the design and delivery of asset-based policy. This section will examine the CPF against these and other considerations to derive insights as to how and why the CPF was able to evolve into an effective and comprehensive life-long system of asset building.

Inclusiveness

Policies are effective only to the extent to which they are able to first enroll the intended beneficiaries, and second to the extent enrolled individuals participate in the policy. Behavioral economists have found that enrollment and participation can be enhanced by having low barriers to entry, and by having automatic enrollment (Choi, Laibson, & Madrian, 2004). The CPF has characteristics which meet both of these standards and some additional innovative features that help maximize participation and coverage.

To facilitate participation, the CPF strives to include virtually everyone who is engaged in the labor market by having a very low wage threshold above which CPF contributions are automatically triggered and mandated. Presently, the moment an employed person earns $50 or more in a month, contributions are automatically credited into the CPF account and an account is automatically opened if the individual is not already a member of the CPF. Self-employed individuals also need to register with the CPF Board when they commence business. Those requiring trade-licenses will have their CPF accounts automatically opened for them with the approval of the license, if they are not already members.

Incentives are also provided to encourage individuals who are not engaged in the formal labor market to participate in the CPF. Under the Minimum Sum Top-up scheme, tax reliefs of up to $7,000 per calendar year are available to members who top-up the Special Accounts of their spouses, siblings, parents or grandparents. CPF accounts will automatically be opened when CPF accounts have not yet been established for the recipients of the top-ups.

In addition to tax incentives, the CPF also experiments with various innovative and novel approaches to encourage Singaporeans to open accounts with, and contribute to, the CPF. For example, the government has used the CPF over the years as the platform to distribute either budgetary surpluses or economic assistance. During those occasions, special outreach efforts were made to encourage those who did not already have CPF accounts to have accounts opened. More recently, the CPF Board implemented the Medisave Contribution Draw (MCD), a lottery, to encourage low-income informal workers and self-employed persons, who historically participated at lower levels, to contribute to their Medisave Accounts. Winners of the MCD stand to win up to $5,000 in the quarterly draws that run through March 2009. Members who meet higher levels of their Medisave contribution obligations have more chances to win (Central Provident Fund Board, n.d.-d).

Furthermore, the inclusive nature of the CPF has been increased by policies such as the Children Development Accounts (CDA)[2], Edusave Accounts[3], and the Post-Secondary Education Accounts (PSEA)[4], that link children to the CPF structure. Since 1993, every Singaporean child has been automatically enrolled in the CPF through its integration with the Edusave Accounts. This occurs as unused balances in the Edusave Accounts are rolled-over into the CPF account when the child completes secondary education. With the implementation of the Post-Secondary Education Accounts, unused balances in the Children Development Accounts and the Edusave Accounts are now rolled over into the Post-Secondary Education Accounts, which in turn have its unused balances transferred into the CPF account. This integration of the CPF with the various asset-based policies for children enables the CPF to achieve universal or near universal coverage as every child is already connected directly or indirectly to the CPF from birth.

Coherence and Integration

Coherence and integration can be viewed from two perspectives: the policy level and the institutional level. At the policy level, asset-based policies would integrate the various asset-building structures into a single, simple, multi-purpose yet coherent system that follows the account-holder through their life-course (Sherraden, 2003b). On the institutional level, asset-based policies would build on and extend existing institutional infrastructure to beneficiaries of the policy. Examples include engaging low income individuals in the financial mainstream by extending financial arrangements to them, thus enabling them to invest in the private equity markets through the asset-based policies.

At the policy level, the CPF is an integral part of the continuum of asset-based policies beginning at birth and extending over the entire life course. It has evolved into a life-long comprehensive social security savings plan and provision. While there are separate asset-based policies targeted at different age-groups, and with different purposes, the various policies are fully integrated into a single, multi-purpose, and coherent larger system of asset building where monies held in the various accounts flow seamlessly from one to another. For example, assets accumulated in the Children Development Accounts that benefit children from birth to age 6, and unused balances in the Edusave Accounts that benefit children from age 7 to 16, are rolled over automatically into the account-holder's Post Secondary Education Account (PSEA). Unused balances in the PSEAs are in turn automatically and seamlessly rolled over to the CPF by the account holders' 30th birthday (Shanmugaratnam, 2007).

The CPF is also integrated with the other asset building and development objectives over the life-course. Examples are encouraging and facilitating home ownership, higher education, investments and healthcare. In the case of the homeownership policy, CPF members can take a loan from their CPF accounts and arrange for the monthly mortgages repayments to be deducted directly and automatically from their CPF accounts. In addition, savings in the CPF accounts can be loaned against for the down-payment of a home purchase. It is this integration of the CPF and the homeownership policy that contributed to the high homeownership rates in Singapore (Hateley & Tan, 2003). The CPF is fully integrated with national healthcare policies as well. In fact, the two CPF-funded medical schemes - Medisave and Medishield, represent two out of the three major components of the healthcare delivery framework in Singapore.

The seamless transfer of monies between the CPF accounts and the various private entities such as mortgage providers, healthcare providers and educational institutions is made possible due to the integration of the CPF with existing institutional infrastructure, both private and public. For example, in the case of home purchase or investments in the equity markets, members could link their CPF accounts with the private financial providers and have monies transferred electronically between accounts.

The integration of the CPF at the policy and at the institutional levels brings the CPF and the various asset-building policies and related market-based infrastructure together to create a single yet multi-purposed asset-building system that spans the entire life course. This larger asset-building policy is itself integrated with, and complements other traditional social welfare policies that are funded separately but also designed to promote broad-based social and economic development.

Progressivity

For the CPF to be effective as a broad-based asset-building instrument, it not only has to ensure widespread participation but that even the least advantaged members of society are able to accumulate a meaningful level of resources in their accounts. While the CPF does not in itself contain any progressive elements, it is designed to be integrated with policies that seek to enhance the economic well-being of the lower income individuals. As mentioned earlier, the CPF Board makes special effort to encourage membership and facilitate the accumulation of assets for lower-income individuals through measures such as the provision of tax incentives, leveraging on familial networks for contributions, and even the use of lotteries where low-income members with regular contributions stand to win cash prizes. In addition, policies such as the Home Ownership Plus Education (HOPE) scheme leverages the CPF infrastructure to provide a package of comprehensive assistance to young low-income families. In this case, the disbursement of a $50,000 government grant for homeownership through annual deposits to the beneficiary's CPF account (Ministry of Community Development Youth and Sports, n.d.). The government also frequently uses the CPF infrastructure to distribute budget surpluses to the population, often with those from lower income households receiving a higher quantum than those with higher incomes.

Social Development across the Life Course

One feature of the CPF that makes it an effective policy structure for the facilitation of life-long asset building is the ability of individuals to leverage account resources at strategic points along the life cycle. The monies in the accounts could be used for a variety asset-building and capital development purposes in pre-retirement while at the same time having safe-guards to preserve adequate balances for retirement use. As mentioned earlier, the savings in the CPF accounts can be leveraged for the purchase of residential properties, for post-secondary education, investments, healthcare, and for various insurance needs in the pre-retirement years. This makes the CPF policy relevant over the entire life course.

Singapore's experience with homeownership is perhaps the best case in point for the ways that the CPF has been drawn upon to achieve broader social policy objectives. In a survey of CPF members, participants responded that the CPF made it more likely that they would own their own homes (Sherraden, et al., 1995). Over 1.5 million members, or 47 percent of CPF members, who owned their homes as at 30 June 2008, had leveraged on their CPF savings to purchase the residential properties. In total, over $131 billion was withdrawn from the CPF for this purpose (Central Provident Fund Board, 2008b). Mortgage servicing is often undertaken mostly, if not fully, from the buyer's monthly CPF contributions. In effect, the CPF functioned as a housing mortgage financing market in Singapore (Asher & Nandy, 2006), and is a primary driver of homeownership rates which exceed 90 percent. Even among the lowest 20 percent of households by income living in public housing, 87 percent were homeowners in 2003 (Singapore Department of Statistics, 2005). Correspondingly, residential properties are the most important component of household wealth in Singapore, with some 47 percent of total assets in the household sector invested in residential properties as of 2003 (Singapore Department of Statistics, 2005). On average, the home equity of households staying in owner-occupied HDB flats was estimated at $154,000, or 3.3 times their annual household income in 2003. For the lowest 20 percent of homeowners by income, the equity-to-income ratio was 9.8 (Singapore Department of Statistics, 2005).

Constant State of Refinement

Possibly one of the most important reasons for the success of Singapore's Central Provident Fund is that it is constantly being refined to better meet the asset development and retirement needs of members in the face of changing demographic and economic realities. For example, since 2007, a number of refinements have been made. In view of longer life expectancies, CPF LIFE, a life-long annuity and insurance plan, was introduced to provide retired members with an income for life. Previously, CPF members would receive, on average, income for 20 years after retirement. To help members meet the CPF Minimum Sum requirement to ensure financial security in retirement, the Minimum Sum Topping-up Scheme was introduced. Under this scheme, family members who are more financially successful could top-up the CPF accounts of those who have not built up sufficient savings in their CPF accounts. Tax incentives are provided to encourage these intra-family transfers. On the healthcare front, all newborns, children and youths are now automatically enrolled in the Medishield scheme, a catastrophic medical insurance plan administered by the CPF Board. Previously, less than half of youths below 20 years old were covered by MediShield. Early coverage will benefit youths and their parents, helping them to meet medical expenses in the event of major or prolonged illnesses. Early MediShield coverage is also beneficial as it would be difficult to obtain subsequent coverage if a person develops an illness in his youth. These are just a few examples of the many refinements in the CPF as it strives to remain a comprehensive social security system that works for Singaporeans of all ages across the life course.

Conclusion

This description and assessment of the CPF demonstrates that as with many social policies, this effort has evolved over time. Its initial emphasis to provide financial security for its members in their retirement years has been continuously amended to the point where the current scheme is designed to promote a more expansive set of objectives that include asset building and social security. Over the years, the fully funded CPF system has been refined into a portfolio of accounts that are to be accessed over the life course. This life-long system of accounts helps families manage investments in the areas of home ownership, healthcare, post-secondary education and asset ownership (Aw & Low, 1996), in addition to providing members a degree of retirement security.

Over the course of its history, the CPF has become one of the primary catalysts for the country's high saving and homeownership rates (Hateley & Tan, 2003). Furthermore, even lower-income participants have been found to benefit. A survey found that even the lowest quintile of wage earners in Singapore have, on average, S$188,000 in assets (Lee, 2005). The integration of the CPF with other policy efforts, such as those aimed at child development, has created a unified system of life-long asset accounts. In this respect, the CPF is regarded as one of the key pillars of the country's social safety net and, for the majority of households, it may be the most important funding mechanism to support social welfare and development.

One of the innovations of the CPF was the recognition that account resources could be leveraged at key points of time to promote other policy objectives. This represents an alternative to the U.S. model where the primary leveraging opportunity for families is access through homeownership. While it may be difficult to create a U.S. system of accounts that could immediately facilitate leveraging, it is possible to envision how such a system could be developed over time. This account system could be designed in ways that are distinct from the existing Social Security system. While the CPF may not be as effective, or even be replicated, outside of the Singapore context, it nonetheless offers some lessons for the establishment of asset accounts that follows, and develops the individual, over the life course.

Notes

[1] As at March 11, 2009, S$1 is equivalent to approximately US$0.67.

[2]The CDAs are matched savings accounts established for every child from birth to age 6 that can be used for human capital development purposes during early childhood.

[3]Every school-going child has an Edusave Account to receive annual government grants that could be used to purchase extra-curricular enrichment programs.

[4]The PSEA is established to facilitate savings for Post-Secondary Education. See Loke & Sherraden (2007) for more information.

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Appendix 1

CONTRIBUTION RATES (FROM 1 JULY 2007) FOR EMPLOYEES WHO ARE SINGAPORE CITIZENS OR SINGAPORE PERMANENT RESIDENTS (3rd YEAR ONWARDS)

	35 years and below		**Above 35 – 50**		**Above 50 - 55**		**Above 55 - 60**		**Above 60 - 65**		**Above 65**	
Total amount of the employee's wage for the calendar month (1)	Contributions payable by the employer for the calendar month (2)	Amount recoverable from the employee's wages for the calendar month (3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Not exceeding $50	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Exceeding $50 but not exceeding $500	14.5 percent of the employee's total wages for the month	Nil	0.0964 of the difference between the employee's total wages for the month and $50	Nil	0.0697	Nil	0.0498	Nil	0.0332	Nil	0.0332	Nil
Exceeding $500 but not exceeding $750	a. 14.5 percent of the employee's total wages for the month; and b. 0.48 of the difference between the employee's total wages for the month and $500	a. Nil b. 0.48 of the difference between the employee's total wages for the month and $500	c. 0.0964 of the difference between the employee's total wages for the month and $50; and d. 0.48 of the difference between the employee's total wages for the month and $500	c. Nil d. 0.48 of the difference between the employee's total wages for the month and $500	0.0697 0.432	Nil 0.432	0.0498 0.3	Nil 0.3	0.0332 0.18	Nil 0.18	0.0332 0.12	Nil 0.12

Appendix 1

CONTRIBUTION RATES (FROM 1 JULY 2007) FOR EMPLOYEES WHO ARE SINGAPORE CITIZENS OR SINGAPORE PERMANENT RESIDENTS (3rd YEAR ONWARDS), CONT.

	35 years and below		Above 35 – 50		Above 50 - 55		Above 55 - 60		Above 60 - 65		Above 65	
Total amount of the employee's wage for the calendar month (1)	Contributions payable by the employer for the calendar month (2)	Amount recoverable from the employee's wages for the calendar month (3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Exceeding $750 but not exceeding $1200	a. 14.5 percent of the employee's total wages for the month; and	a. Nil	c. $67.5 and 0.1966 of the difference between the employee's total wages for the month and $750; and	c. Nil	$48.825 and 0.1315	Nil	$34.875 and 0.0825	Nil	$23.25 and 0.0416	Nil	$23.25 and 0.0416	Nil
	b. $120 and 0.24 of the difference between the employee's total wages for the month and $750	b. $120 and 0.24 of the difference between the employee's total wages for the month and $750	d. $120 and 0.24 of the difference between the employee's total wages for the month and $750	d. $120 and 0.24 of the difference between the employee's total wages for the month and $750	$108 and 0.216	$108 and 0.216	$75 and 0.15	$75 and 0.15	$45 and 0.09	$45 and 0.09	$30 and 0.06	$30 and 0.06
Exceeding $1200 but not exceeding $1500	a. 14.5 percent of the employee's total wages for the month; and	a. Nil	c. $156 and 0.205 of the difference between the employee's total wages for the month and $1200; and	c. Nil	$108 and 0.165	Nil	$72 and 0.135	Nil	$42 and 0.11	Nil	$42 and 0.11	Nil
	b. $120 and 0.24 of the difference between the employee's total wages for the month and $750	b. $120 and 0.24 of the difference between the employee's total wages for the month and $750	d. $120 and 0.24 of the difference between the employee's total wages for the month and $750	d. $120 and 0.24 of the difference between the employee's total wages for the month and $750	$108 and 0.216	$108 and 0.216	$75 and 0.15	$75 and 0.15	$45 and 0.09	$45 and 0.09	$30 and 0.06	$30 and 0.06

Appendix 1

CONTRIBUTION RATES (FROM 1 JULY 2007) FOR EMPLOYEES WHO ARE SINGAPORE CITIZENS OR SINGAPORE PERMANENT RESIDENTS (3rd YEAR ONWARDS), CONT.

	35 years and below		Above 35 – 50		Above 50 - 55		Above 55 - 60		Above 60 - 65		Above 65	
Total amount of the employee's wage for the calendar month	Contributions payable by the employer for the calendar month	Amount recoverable from the employee's wages for the calendar month										
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Exceeding $1500	a. 34.5 percent of the employee's Ordinary Wages for the month up to $1,552.50 and	a. 20 percent of the employee's Ordinary Wages for the month up to $900; and	c. 34.5 percent of the employee's Ordinary Wages for the month up to $1,552.50; and	c. 20 percent of the employee's Ordinary Wages for the month up to $900; and	28.5 percent max $1282.50	18 percent max $810	20 percent max $900	12.5 percent max $562.50	12.5 percent max $562.50	7.5 percent max $337.50	10 percent max $450	5 percent max $225
	b. 34.5 percent of the Additional Wages payable to the employee in the month	b. 20 percent of the Additional Wages payable up the employee in the month	d. 34.5 percent of the Additional Wages payable to the employee in the month	d. 20 percent of the Additional Wages payable up the employee in the month	28.5 percent	18 percent	20 percent	12.5 percent	12.5 percent	7.5 percent	10 percent	5 percent

Source : Singapore Central Provident Fund Board. (2008). Retrieved from http://mycpf.cpf.gov.sg/NR/rdonlyres/9F114FAD-9ED0-479E-BC80-875DEBFA37DB/0/AnnexB.pdf

Note

1. The rates in columns (2), (4), (6), (8), (10) and (12) represent the amounts payable by the employer in the first instance. The rates in columns (3), (5), (7), (9), (11) and (13) represent the amounts that are recoverable from the employee's wages.
2. For employees in the above 50 to 55, above 55 to 60, above 60 to 65 and above 65 age groups, replace the figures underlined in columns (4) and (5) with the corresponding figures in columns (6) to (13).
3. The contributions should be rounded off to the nearest dollar. An amount of 50 cents should be regarded as an additional dollar. When recovering from the employee's wages, the cents should be dropped.

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