

FINANCE, COMPETITIVENESS & INNOVATION INSIGHT | LONG-TERM FINANCE

Early Access to Pension Savings: International Experience and Lessons Learnt



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TABLE OF CONTENTS

EARLY ACCESS TO PENSION SAVINGS: IN FERNATIONAL EXPERIENCE AND LESSONS LEARN I	3
Introduction	3
Literature Review	3
International Practice	5
Types of Access	6
Examples of Hybrid Savings Schemes	7
Case Study: Central Provident Fund - Singapore	10
Impact of Early Withdrawal on Pension Savings – A Stylized Example	11
Conclusion	12
BIBLIOGRAPHY	13
APPENDIX 1: ACCESS TO PENSION SAVINGS BY COUNTRY	15



EARLY ACCESS TO PENSION SAVINGS: INTERNATIONAL EXPERIENCE AND LESSONS LEARNT¹

Introduction²

he objectives of a well-designed pension system are poverty reduction in old age and income smoothing throughout an individuals' lifetime. Over the last thirty years, changing demographic trends have caused a shift from 'pay as you go' and occupational defined benefit (DB) schemes - where the obligation for paying for retirement income is with the state and employers - to defined contribution (DC) schemes, where the obligation to save for retirement rests more with individuals.

The transition to DC schemes did help establish a strong link between contributions during working life and benefits during retirement, for individuals. However, an increasing challenge has been balancing genuine needs for some pre-retirement liquidity, access to savings and providing adequate income post retirement for individuals. The need to get this balancing act right is being felt increasingly as coverage of national social security systems is expanded to include more of the non-salaried workforce which often has lower levels of income, more periods of unemployment and more irregular earnings.

This note surveys recent literature and country experiences to understand if and how countries address the need for pre-retirement liquidity in both mandatory and voluntary DC schemes. The note also uses simple modelling to illustrate the impact of allowing access to pension savings on income adequacy after retirement. The report concludes with recommendations based on emerging best practice.

Literature Review

The need for pre-retirement liquidity often arises, due to lack of short-term 'emergency' saving and indebtedness. As noted by the NEST Insights paper (2017): "high-cost and unpredictable oneoff expenses such as the breakdown of a household appliance can cause acute short-term financial hardship for people whose disposable income after essentials is low. In addition, financial shocks among low income groups can lead to debt spirals which can cause acute financial stress. Any severe or persistent pressure on liquidity can have significant health effects, which can in turn affect productivity and earning capacity.... In an extreme case, one could imagine for example, a short-term financial shock such as the inability to afford a car repair having dramatic knock-on consequences such as loss of earnings and increased debt."

There is limited systematic government action for addressing the need for these one-off significant expenses for individuals. Not only does this

¹ This note has been prepared by Fiona Stewart and Himanshi Jain of the World Bank and Will Sandbrook of the National Employment Savings Trust (NEST).

² This note addresses accessing pension assets before retirement. The question of how pension savings should be paid out at / after the retirement age (via a lump sum, programmed withdrawal, annuity payment) is a separate issue worthy of analysis and discussion.

represent a policy challenge in its own right but it also presents threats to the adequacy and sustainability of retirement systems, as when faced with extreme financial hardship individuals in many countries more often than not turn to these long-term savings.

Research has shown that when faced with adverse shocks, limited access to retirement savings can in fact help increase the overall welfare of these individuals. For example, recent research by Agarwal et al. (2014) on Singapore's mandatory DC plan has shown that early access led some individuals to make sub-optimal savings decisions, but that providing some degree of access to pensions savings may allow liquidity constrained consumers to better smooth consumption. Evidence from early access to withdrawal funds permitted in some Pacific island countries hit by a natural disaster has provided evidence that if the shock is large enough or the amount allowed for early withdrawal is not 'too generous,' a onetime early withdrawal can improve welfare (Guo et. al (2018)). That said, most countries cover natural disaster risks through unconditional cash transfer programs rather than by allowing access to pension savings.

However, the dangers of accessing pension savings are only too apparent. Pension savings can be depleted to such an extent that inadequate retirement incomes are provided. Even in the case of accessing pension funds for housing, this can leave individuals 'asset rich but cash poor' (as is the accusation with the Singapore system – see following case study). If the loan is not paid back, individuals put both their home and their retirement savings at risk. Importantly, even in systems without such a direct 'early access' link, risks to retirement savings can flow through indirectly for example, through contribution holidays, to fund debt repayments or more fundamentally through reduced earnings capacity, for long-term savings.

Research has shown that more vulnerable individuals, especially those with no other financial

assets and those with less education, not only have the least amounts of savings in retirement accounts, but also the highest withdrawal rates (NEST insights, 2017). For example, in the UK it was claimed that pension savings constitute a major source of wealth for lower income workers, who may otherwise be excluded from other financial services (such as mortgage loans), and therefore access to savings should be granted. However, consumer interest groups argued that giving workers access to pension savings in case of hardship, (e.g., for mortgage arrears), would leave them open to pressure from lenders and creditors to meet arrears using their pension wealth.

This worry that access to pension savings could expose vulnerable individuals to even higher financial risk and losses has also prompted strict rules around early access to pension funds in some countries. In 2011, after a call for evidence on early access, the UK government dropped a proposal to provide early access to pension saving (excluding specific cases of hardship), citing limited and inconclusive evidence on the positive impact for under-saving groups or significant benefit to individuals facing financial hardship.³

In addition to the direct risk to individuals, there are indirect impacts on the pension system from allowing early access to funds. High volumes of withdrawals would force fund managers to increase portfolio liquidity which would reduce opportunities to investment in long-term instruments, thereby reducing their ability to take advantage of illiquidity premiums and generate higher returns. Analogously, since financial emergencies tend to be unexpected and urgent, accessing funds directly from a pension fund invested to deliver long-term returns could lead to very poor 'value' withdrawals if they take place at an inopportune moment in terms of market conditions. The impact on pension fund asset allocation and performance from allowing access to pension savings for the purpose of switching between pension fund providers is examined in Pedaraz Morales et al (2017).

³ See HM Treasury, (2010), 'Early Access to Pension Savings'

Providing for early access would also require additional administrative costs - especially if suitably rigorous verification standards are put in place to ensure that the funds withdrawn are used for the stated purpose and are needed due to 'financial hardship.' Where retirement income is the only goal, managing a single account is by design the most efficient way of managing pension portfolios. However once these goals are somewhat opened up, the position becomes more nuanced.

There are also implications for tax systems, as in many DC schemes pension contributions receive a tax exemption in order to incentivize long-term savings. To prevent tax avoidance, unwinding tax breaks on early withdrawals is required. Indeed, in some countries additional penalties are imposed on early withdrawals to act as a deterrent. For example, in the United States, withdrawals before age 59.5 years are taxed as ordinary income, and in addition, a 10% tax penalty applies.

The following section of the note provides an overview of countries that either allow early access of some sort, or which have or are considering dual-account structures that utilize some aspects of the pension system infrastructure to also serve additional savings goals or purposes.

International Practice

The trade-off between poverty avoidance at old age and poverty avoidance at a younger age (by allowing for early access to long-term savings) depends critically on what the overall pension environment is and whether other safety nets / health insurance is available to individuals. The polices on 'early access' also differ depending on

whether the contributions to the DC scheme are mandatory or voluntary. For example, it could be argued that countries such as the US can afford to be more liberal with access to their DC '401k' retirement savings since old age poverty alleviation is addressed through social security, whilst heathcare costs in the country are substantial and rest with individulas. Evaluating access to other forms of savings before implementing rules on inservice withdrawals is also important. For example, in the African context where informal sector workers may not have access to bank accounts to cover emergency liquidity needs, allowing access to savings might be more critical.

In short, a 'one-size fits all' approach as far as policies on early access to pension savings are concerned is not appropriate. This section discusses how different countries have chosen strategies more approporiate to their circumstances. This survey of rules for in-service withdrawals shows that they differ depending on whether contributions to the scheme are mandatory or voluntary (See Appendix for details).

Access to *mandatory* pension savings is rare and, when allowed, is highly restricted and requires a repayment of the withdrawn amount. The systems in Canada⁴ and Australia allow controlled access in clearly defined cases of disability or terminal illness, severe financial hardship as determined by the plan trustee, payment to a beneficiary following the death of an account owner or temporary residents permanently leaving the country. There continue to be restrictions on the use of withdrawn funds even among these exceptions e.g. withdrawal of funds by the disabled are limited to disability-related home or vehicle modifications, and palliative care.⁵

⁴ Since December 21, 2010, Ontario has permitted 'locked in retirement account (LIRA)' holders to withdraw up to 50% of their LIRA balances upon transfer to a 'life income fund (LIF)', as long as the holder is at least 55 years old and the distribution is made within 60 days of the transfer. Those with less than C\$21,000 (in 2014) across all of their locked-in accounts may also withdraw all of these balances if at least age 55.

⁵ Withdrawal of funds in cases of severe financial hardship in Australia is limited to individuals under age 55 and 39 weeks who have received government income support payments for at least 26 consecutive weeks. The withdrawal needs to be approved by the plan trustee and has to be between AU\$1,000 - AU\$10,000 to cover reasonable and immediate family living expenses only (Beshears et al.,2015).

Where DC systems are *voluntary*, some access may be allowed, partly as a way of incentivizing individuals to sign up to such schemes. Some early access (before age 55) from voluntary schemes is allowed in New Zealand and Fiji. Voluntary occupational pension schemes, sponsored by employers, allow for some early access in Germany⁶, Denmark, Netherland, Sweden, the United States and Belgium.

401(k) schemes, the main pension saving plans sponsored by employers in the USA, have some of the most liberal access rules. They allow for 'hardship withdrawals' for medical expenses, education, principal residence purchase, funeral, eviction, and unemployment, subject to payment of personal income tax and a 10% penalty on amounts withdrawn. Loans are limited to no more than 50% of savings or USD 50,000 whichever is lower, interest is charged and the maximum repayment period is five years⁷. The 401(k) accounts can, but is not required, to be moved to an Individual Retirement Account (IRA) or to another employer's 401(k) once the individual no longer works for the sponsoring employer, which provides considerable scope for liquidation before the withdrawal eligibility age of 59.5.

Despite these penalties, withdrawal levels and costs to the system are high. For example, it is estimated that for every 1 dollar contributed to

the accounts of savers under age 55, 0.4 dollars simultaneously flows out of the individual accounts, not counting loans (Sabelhaus et.al 2015; Munnell et.al, 2015). Research also found that in 2012, 21% of all employees eligible for a loan had taken one, and the average loan amount was 13% of the individual's account balance. 9 10 Other studies found that outstanding loans and withdrawals tend to offset about 40% of the positive effect of auto-enrolling workers into company pension plans.¹¹ Such findings should be balanced against the arguments that allowing such access can incentivize individuals to remain enrolled in these systems, and against the potential costs of alternative mechanisms of finding equivalent sums, most particularly the risk of turning to high-cost debt.12

Types of Access

The ways in which individuals can use their pension savings for other purposes differs by country. Some of the common methods include:

- (a) Permanent withdrawal: which allows access to funds without repayment obligations (e.g. Denmark, Australia and the United States under cases of extreme financial need);
- (b) Loan and repayment: where an individual borrows directly from his or her pension fund and

⁶ Riester pensions allow for early withdrawals of up to 100% of the accumulated balance for the purchase of owner-occupied housing. Otherwise, account holders are barred from making withdrawals before age 62 (age 60 for contracts concluded before 2012).

⁷ The repayment schedule may be extended if the money is to be used as down payment for a home

⁸ https://www.ebri.org/pdf/briefspdf/ebri_ib_012-13.no394.401k-update-2012.pdf

⁹ The default rates are fairly low, with only 1 in 10 loans failing to be repaid, and this occurs mainly when switching jobs.

¹⁰ Pre-eligible withdrawals from the IRA can be made by paying a 10% penalty tax. Tax penalties do not apply to withdrawals related to total disability, death, or medical costs that exceed 7.5% of adjusted gross income.

¹¹ See TIAA Institute, (2018), 'Potential vs. Realized Savings Under Automatic Enrollment' https://www.tiaainstitute.org/publication/potential-vs-realized-savings-under-automatic-enrollment

¹² Independent, 2nd August 2018, 'Using pension pots to buy homes makes sense - and will boost enrolment rate' https://www.independent.ie/business/irish/using-pension-pots-to-buy-homes-makes-sense-and-will-boost-enrolment-rate-37176106.html

is required to pay it back (e.g. housing loans in Switzerland¹³, self-managed funds in Australia);

- (c) Pensions as collateral: 'pension pledging' which refers to the possibility of using pension assets as collateral. By allowing a pension pledge or collateral, pension funds essentially provide a third-party institution with a guarantee that the member's pension savings will secure a loan or part of a loan from the lending institution (usually banks). Occupational pension plans in South Africa often provide such services to their members to access lower cost housing loans. ¹⁴ Offering pension savings as a pledge instead of providing a direct loan has the following advantages:
- The loan is provided by a financial institution and not from the retirement fund – allowing investments to continue to earn investment returns.
- The pension fund would not need to incur additional costs of building expertise in lending, expose themselves to the risk of late payments or be concerned about eroding fund assets to finance the loan book. That said, offering this service does involve significant administrative costs to track pension assets that are subject to liens.

Though not yet operational in other countries, there has been a discussion of using accrued pension rights rather than assets as collateral. In order to keep the cost low, the loan would need to be highly standardized. In order to avoid overuse of the fund, the interest rate charged on this loan should be higher than loans offered in the banking system. In case of (standardized) default, individuals should

not be penalized (e.g. via credit scores). The bank would take over the collateral, and the individual would no longer have the possibility of using this facility again. This option would be more efficient than a withdrawal of funds, and consequently preferable in countries where such standardized loans could be made available.

(d) Hybrid savings models: includes a feeder fund' or 'sidecar' account, which consists of a saving product, linking liquid savings and pension savings together. Under this arrangement, contributions paid into the combined account structure would at first be distributed between liquid and illiquid accounts. When the balance in the liquid account reaches a predetermined threshold level, known as the 'savings cap' all contributions thereafter go entirely into the illiquid retirement account. If at any point the saver withdraws funds from the liquid account, reducing the balance to a level below the savings cap, future contributions would once again start being divided between the liquid and illiquid accounts.

Examples of Hybrid Savings Schemes

Such schemes are currently being considered or piloted in various countries, including the US, New Zealand and the UK.¹⁵ The NEST Insight paper (2017) explains how the motivation for a 'sidecar account' comes from the notion of 'mental accounting', according to which people tend to manage their finances in distinct 'jars' for distinct goals, either literally or metaphorically. The paper argues that given the interconnectedness of financial needs, people need to be able to move resources between jars. In practice, where they cannot, the

¹³ As of 1 July 2012, Switzerland tightened its rules on accessing pension funds for purchase housing. Households must now provide at least 10% of the property's value as equity other than pension assets from a minimum total amount of 20% equity necessary to purchase housing property, and new borrowers are required to reduce their loan-to-value ratio to a maximum of two thirds within 15 years.

¹⁴ A parallel paper to this note on Pensions Savings and Housing Finance is currently being prepared.

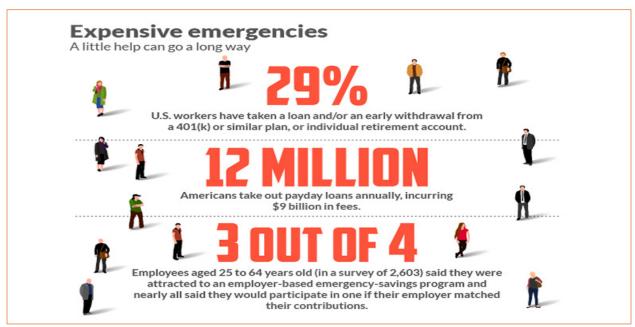
¹⁵ This is being run by the National Employment Savings Trust (NEST), in collaboration with Professor Brigitte Madrian, at Harvard Kennedy School, Will Sandbrook, Matthew Blakstad, Michelle Cremin and Clare Hodgkinson, NEST Corporation, London.

outcomes can often be sub-optimal and inefficient. For example, in the absence of liquid savings, the most common mechanisms for funding unexpected peaks in consumption or falls in income are borrowing through credit cards, personal loans or 'payday' loans, or from friends and family or, where possible, reductions in 'essential' spending. This, in turn, results in people simultaneously servicing a high-cost debt while incurring relatively lower offsetting returns on any savings that do exist. The sidecar model attempts to break this inefficiency by allowing for regulated access to savings to meet short term and contingency needs.

In the US, Prudential financial (2018) recently announced a similar pilot programme with some employer clients. Work by Madrian et al (working paper, 2018) has sought to identify the different legal and regulatory structures under which such a model could work. The AARP recently published a

representative study of American adults looking at attitudes to such a model and, in particular, at trade-offs between different design options and features. Some of the nascent state 'auto-IRA' programmes have considered or are considering building in sidecar-like features. Recent draft legislation was introduced at the federal level seeking to make it easier for employers to offer a sidecar scheme within their 401(k) plans.

Similar proposals for 'rainy day' sidecar accounts have been proposed for the KiwiSaver scheme in New Zealand- partly in response to the fact that withdrawals to the system have been increasing by 25% a year recently.¹⁷ Individuals could be offered the choice to have their KiwiSaver contributions first deposited into an access account. Once this reaches \$1,000, contributions would then flow into their long-term savings accounts.

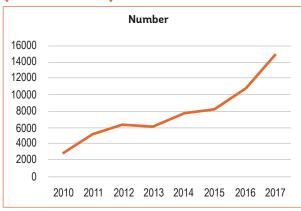


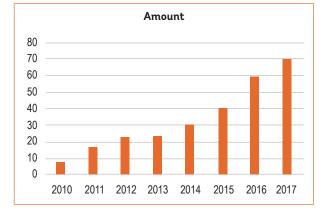
Source: Prudential/ AARP16

¹⁶ The 'sidecar' plan that could soon be attached to your 401(k)', Market Watch, 28th October 2018 https://www.marketwatch.com/story/the-sidecar-plan-that-could-soon-be-attached-to-your-401k-2018-10-01

¹⁷ 'KiwiSaver 'rainy day' plan could help families weather money crises' June 12 2018 https://www.stuff.co.nz/business/money/104560032/kiwisaver-rainy-day-plan-could-help-families-weather-money-crises

Figures 1+2: Number and Amount of Kiwi Saver Hardship Withdrawals (NS \$ million)





Source: Commission for Financial Capability

Evidence on the need for separate accounts, to balance short term savings needs with long term retirement adequacy is supported by recent theoretical evidence by Beshears et al. (2015). The authors attempt to calculate the socially optimal level of illiquidity in a stylized retirement savings system. The study assumes that a planner can set up a hybrid savings schemes, i.e., multiple accounts for households -a perfectly liquid account and/or partially illiquid retirement savings accounts with early withdrawal penalties. Revenue from penalties is collected by the government and is assumed to be redistributed through the tax system. The study finds that under such a scenario the socially optimal system mirrors the US system where one has (a) a liquid account (e.g. personal saving account), (b) illiquid account (e.g. like the social security DB account in US) and (c) an account with early withdrawal penalty of about 10% (e.g. like the 401(k)).

The mandatory Provident Funds in Asian countries, such as Singapore and Malaysia, follow a similar model – though it should be noted that there are differences in the systems as provident funds have

broader goals and objectives beyond a single focus on pension provision. Sub-accounts for retirement savings and other purposes (housing, medical) are built up and any residual savings from the nonretirement accounts is transferred to the pension account upon retirement. However, experience has shown that in practice, individuals struggle to meet the saving cap and hence have little to no income to be transferred to the illiquid account. For example, in the Central Provident Fund (CPF) in Singapore, as of March 2017, S\$200 billion had been withdrawn by nearly 2 million members, predominantly to fund public housing¹⁸. It is estimated that only 6 percent of the total contribution rate of 37 percent is used to effectively finance retirement, resulting in inadequate retirement income for the elderly (See Box). Malaysians also face the challenge of the inadequacy of their savings upon retirement. In 2013, 69 percent of EPF members aged 54 were found to have savings below RM50,000 (US\$12,280). 70 percent of retirees reported having exhausted their EPF savings within 3-5 years (Asher et al., 2012).

¹⁸ It is to be noted that the CPF in Singapore lists that its objective is not only to provide retirement svaings but also to assure everyone owns their own home.

Case Study: Central Provident Fund - Singapore

The Central Provident Fund of Singapore is a comprehensive social security system for citizens and permanent residents. It is a mandatory scheme that requires contributions from both employees (20% of employee's income) and employers (17% of employee's income). The total contribution is allocated to several accounts:

- Ordinary account, to which 23% (of the 40% contribution) is allocated and used for housing, insurance, education, and other approved investments.
- Medisave account, to which 8% (of the 40% contribution) is allocated for hospitalization and approved medical insurance costs.
- Special account, to which 6% (of the 40% contribution) is allocated for old age and investment in retirement-related financial products.
- A retirement account is automatically created on members' 55th birthday.³

Housing funds can be used to purchase or refurbish a house, and/or to pay for a mortgage. Multiple properties can be covered. The funds can be used for private housing, but the vast majority of the assets are used to purchase public housing supplied centrally by the Housing and Development Board (HDB). The HDB receives an annual grant from the government to construct housing and provide mortgages (at subsidized rates, which results in a very small private mortgage market). All land in Singapore is state owned with property purchased on a 99-year lease.

The housing program in Singapore has been very successful, resulting in 90% homeownership rate (80% in public housing). However, the flip side has been that the contribution rate for retirement savings has remained low (6%), and there has been little savings left in the other accounts to top up income post retirement. In 2016 withdrawals from CPF accounts amounted to over 50% of contributions. As of March 2017, S\$200 billion had been withdrawn by nearly 2 million members, predominantly to fund public housing. This has resulted in Singaporeans being said to be 'housing asset rich but cash poor' in retirement. Concern about retirement adequacy has been growing as the Singaporean population ages.⁵



Notes

- ¹ The percentage contribution has fluctuated quite widely over time to reflect the financial fortunes of Singaporeans. At inception in 1955, contributions were 10% and gradually increased to 50% by 1984. However, during the East Asian economic crisis in 1997, for example, the CPF contribution rate was reduced from 40% to 30%.
- ² Contributions are not uniform and decline with age.
- ³ Central Provident Fund website. Available online at https://www.cpf.gov.sg/members/aboutus/about-us-info/cpf-overview
- ⁴ Chua, B. H. 2014. Navigating Between Limits: The Future of Public Housing in Singapore. Housing Studies, vol. 29, pp. 520-533, 17 February 2014
- ⁵ Koh, B.S.K. 2014. Singapore's Social Security System: A Review and Some Lessons for the United States. Pension Research Council, Wharton School, September 2014. Available online at http://pensionresearchcouncil.wharton.upenn.edu/wp-content/uploads/2015/09/WP2014-18-Koh.pdf

Impact of Early Withdrawal on Pension Savings – A Stylized Example

In direct-withdrawal systems, unless the amounts withdrawn are repaid with interest, allowing for early withdrawals from DC schemes inevitably leads to lower replacement rates (RR) at retirement.¹⁹ The impact of early withdrawals on RR is quantified using a stylized example. Assume an individual starts contributing at age 30 and retires at age 60. The contribution rate is 15% of gross salary, the real return on investment is 3%, and the asset management fee is 1% of assets.²⁰

Table 1 below shows the reduction in pension savings under three scenarios: (a) no early withdrawal allowed; (b) one-off withdrawal of 25% of accumulated savings after 15 years of contributions; (c) individual withdraws 25% after 15 years of service. As one would expect the impact is larger if early withdrawal is allowed and the reduction is severe if more than one withdrawal is allowed. In scenario (c), with multiple withdrawals, the fund available for the individual at retirement is approximately 29% lower than the case of no withdrawal. In a DC fund, the reduction in the size of pension savings naturally leads to a reduction in the amount of retirement income received.

The impact would likely be larger than these estimates suggest, as there would be an effect on

the investment portfolios and consequently the returns which the asset managers could be expected to deliver. The administrative costs of managing these withdrawals would also have to be taken into account.

The modelling also assumes continued contribution payments (i.e., 100% contribution density). However, experience across countries shows that evasion, underpayment, job changes/losses, maternity leave, etc., which lead to temporary or permanent exit from the covered labour force, are commonplace, thereby reducing individuals' overall contributions to the fund.

The impact on retirement income is one of the reasons why dual-account models hold some (at least theoretical) appeal. Increasing contributions to illiquid, or semi-illiquid pension products risks both causing or exacerbating short-term financial hardship and triggering opt out or cessation from voluntary systems. By contrast, adding a tranche to the 'required' or 'recommended' contribution that initially goes to a liquid-access account does not run the same risks. In practice, evidence is that those on lower incomes can often create more capacity to save than they expect they will be able to manage (see, for example, the UK Savings Gateway pilots), and so over time it is reasonable to expect that such additional contributions will both increase short-term financial resilience and begin, over time, to increase the flow of contributions to pension products.

Table 1: Reduction in Pension Savings at the time of Retirement as % of prevailing average wage for DC scheme (results subject to assumptions listed above)

	Reduction in fund
25% withdrawal after 15 years	14.2%
25% withdrawal after 15 years + after 20 years	28.9%

¹⁹ The replacement rate is pension income amount divided by an individual's final salary level.

²⁰ Inflation rate is assumed to be 2% for the projection period, nominal wage growth is 3%, nominal return on investment is 5%. The individual is expected to live for 20 years after retirement (based on mortality patterns of the world on average, and hence account for increase in Life expectancy over the next 30 years as estimated by the UN).

Conclusion

The primary goal of a pension system should be to provide adequate, affordable, sustainable and robust retirement income. Pension funds should have a single objective which is to provide adequate pensions to individuals, and should be managed with one portfolio (which can evolve through the individual's lifetime), to meet this objective. This goal is challenging enough, and one which sadly some of the systems around the world are falling short of. That said, there is evidence that policymakers find it hard, particularly in individualized DC systems, to resist the argument that workplace 'pensions' should perhaps be opened up to other goals. Once this happens, there is a legitimate debate about how most efficiently to facilitate these other goals while preserving or even improving pension outcomes.

Fundamentally, to the extent that contribution levels and other parameters in private pension systems are strategically determined, they are almost invariably structured to deliver smooth income into retirement assuming persistent contributions and reasonable returns. However, experiences from countries with well-designed DC plans has shown that they too struggle with inadequate retirement benefits due to one or more of the following reasons low contribution density, lower than required contribution rates, movement in/out of labor force (particularly for women), low rates of return, high marketing and administrative expenses, low or even negative spread between real interest rates and real wage growth²¹, high cost of annuities due to low interest rates, anticipated mortality improvement and anti-selection in plans where annuitization is optional. Since adequacy of income after retirement is already a concern for well-designed DC plans, it is highly unlikely that these plans could then also meet secondary shorter-term purposes like 'emergency needs'. The challenge, therefore, is to balance the current best interests of individuals with their future retirement needs, without jeopardizing either for the sake of expediency.

Some controlled access to long-term savings for affordable housing, medical expenses, and emergency needs could be facilitated – but in a limited and controlled method. Using funds as collateral rather than for outright withdrawal is a preferable option. Standardizing access to loans maybe the most cost-efficient option to provide liquidity for pension fund members. However, it is recognized that in some situations lenders might not be willing to extend credit based solely on the pension fund assets which are subject to market volatility.

Alternatively, a system with multiple accounts with varying degrees of liquidity could be designed. Although not the optimal design for pension savings, such products may prove attractive to individual and encourage participation in voluntary systems. This may ultimately be more efficient to the extent that the system is either explicitly or implicitly evolving to serve additional objectives. How to balance these accounts will depend on the overall pension system, access to savings, and the country context. For example, it could be argued that in the US the wholly illiquid account is Social Security, and the 401ks serve as the sort of 'middle-tier' that can be used to withdraw money from in cases of emergencies. However, in any country where income-replacement levels from pillar-one falls short of adequate protection, the logic would suggest a second pillar with a wholly illiquid component, and then one or more liquid components.

It is important to remember that no system, however well designed, can make up for a short-fall of contributions. The total going into the various accounts needs to be sufficient. Letting people tap their savings when total contributions are barely even sufficient to fund retirement will not serve any policy goal.

²¹ This occurs in many rapidly developing countries

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APPENDIX 1: ACCESS TO PENSION SAVINGS BY COUNTRY

Country	Participation	Access to pension	Taxed	Withdrawal purpose			Withdrawal model			
				Housing	Health	Other	Loan & repay	Permanent	Feeder- fund	Pension collateral
Malaysia	Mandatory	Yes	No	✓	✓	✓			✓	
Singapore	Mandatory	Yes	No	✓	✓	✓			✓	
Denmark	Quasi- mandatory	Yes	Yes			✓		✓		
Netherlands	Quasi- mandatory	No	n.a							
Sweden	Quasi- mandatory	No	n.a							
Switzerland	Mandatory	Yes	Yes	✓			✓			✓
Australia	Mandatory	Yes	Yes	✓	✓		✓	✓		
Chile	Mandatory	No	n.a							
Sweden	Mandatory	No	n.a							
Mexico	Quasi- mandatory	Yes	No			✓	✓	✓		
New Zealand	Voluntary	Yes	No	✓	✓	✓		✓		
United Kingdom	Voluntary	No	n.a							
United State	Voluntary	Yes	Yes	✓	✓	✓	✓			

Source: Compiled using data from Huitron (2015)





