AN OVERVIEW OF GLOBAL PENSION CHALLENGES

Adapted from a keynote delivered by Mr. Cian O'Driscoll, Australian Country Manager, Financial Risk Solutions (FRS) at the 11th Post Retirement Conference, in Sydney, Oct 2023.

This research is relevant for: Finance, Investment Operations, Technology and Risk Professionals.

INTRODUCTION

IMPROVING PEOPLE'S RETIREMENT WITH TECHNOLOGY

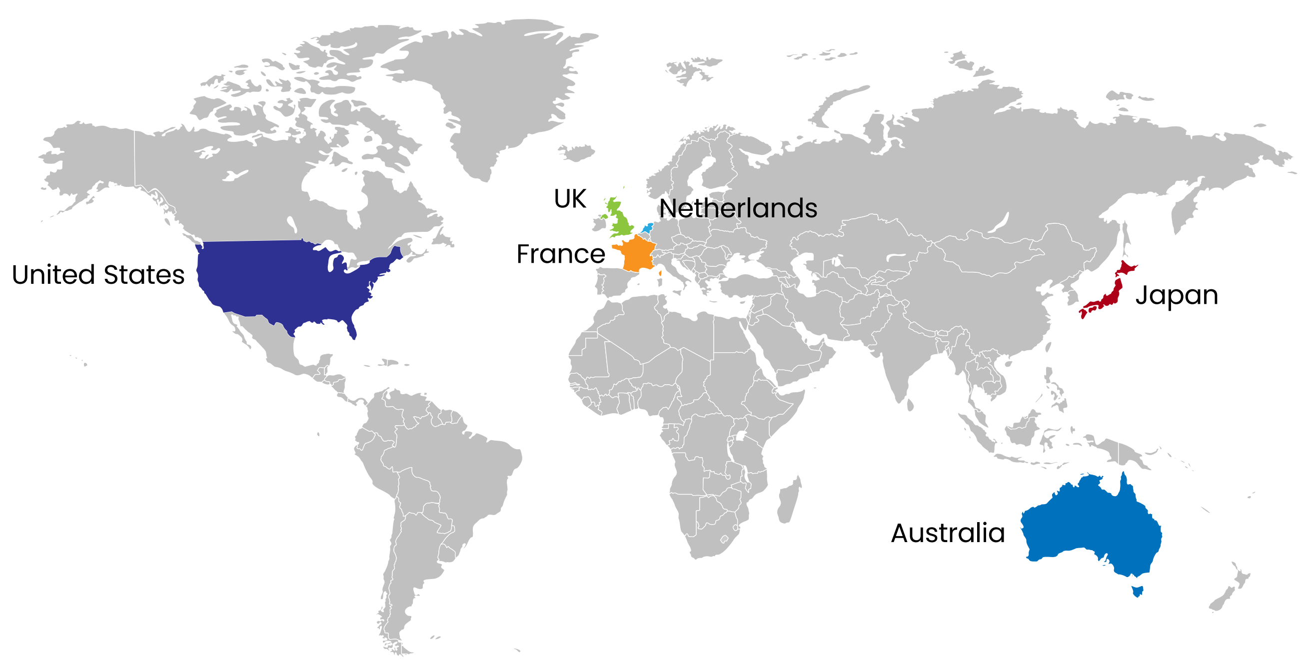
For the first time in human history, people aged 65 and over outnumber children aged five or younger.

The World Health Organisation reports that by 2030, 1 in 6 people in the world will be aged 60 and over, a formidable 1.4 billion people or an increase of 400 million in 10 years. The number will exceed 2 billion by 2050, including 425 million aged 80 and over. We will live in a world where 100th birthdays are common.

Pension plans are facing challenges not seen in the global economy in decades as life expectancies continue to rise as does the populations age while on the other hand we are experiencing greater uncertainty in economic conditions. All these pressures are occurring at a time when individuals are taking on more responsibility as the prevalence of defined contribution (DC) arrangements continue to increase around the world.

This research will review several approaches from various jurisdictions across the globe, including France, The UK, Australia, Japan and The Netherlands. Each with their own unique approach to dealing with an aging population. Software Firm FRS is in a unique position to share these findings given our investment administration software is widely used globally.

OVERVIEW OF GLOBAL PENSIONS



***Global Pension Index Review 2022 – 66% of the population is covered.**

Japan

Japan is aging faster than any other country in the world. The national pension system is under immense pressure to sustain the growing number of elderly while the number of people contributing to the system dwindles. As of 2020, the number of Japanese over 65 reached a record high of 36 million, or 29 percent of the total population of 125 million. This figure is twice as high as it was 25 years ago, and it's expected to increase to 35 percent by 2040, according to the National Institute of Population and Social Security Research.

The old-age dependency ratio- or the numbers of elderly compared to those of working age - is the highest in the OECD. Japan is experiencing a trend called 'forever work' as pensions among many retires underwhelm. Around 66% of people who are past the retirement (60) age are still working.

Even among those in the next higher age bracket of 70 to 74 years, about one out of three people still work. As global populations continue to age more countries will continue to see this 'forever work' trend as many retirees will no longer be able to afford to stop working. Japan is ranked 35/44 of the OECD countries for the adequacy, sustainability and integrity of their pension system.

Are you still working after reaching retirement age?

Still working

Not working

Overall

60-64

65-69

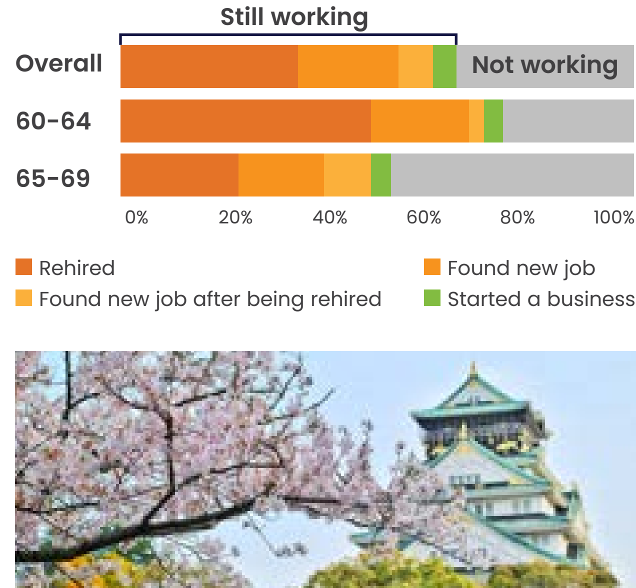
0% 20% 40% 60% 80% 100%

Rehired

Found new job

Found new job after being rehired

Started a business



The Netherlands

The Dutch are considered to have one of the best pension systems in the world. They have one of the lowest levels of old age poverty and this has primarily been achieved due to their defined benefit scheme, which guarantees a minimum payout for life. Over the past decade, defined-benefit plans have not been indexed to inflation to cover cost of living increases. In addition, historically low interest rates may force some pension funds to raise premiums and/or lower pay-outs.

The Dutch government proposal to de-emphasize mandatory defined-benefit (DB) plans in favour of defined-contribution (DC) plans, in which participants shoulder the risks for their own retirement. This is an enormous overhaul. Unsurprisingly it is broadly unpopular with the Dutch public however the government have reiterated plans to push forward with this change to ensure the long-term sustainability of their pension scheme.

This transition will be a first-of-a-kind to move its $1.9 trillion pension system on to a more sustainable path. The move offers plenty of scope for opportunity, but also carries its fair share of risk, as well as the need to communicate more actively with plan members. Typically, in such transitions, defined-benefit plans are closed to new members and their assets and liabilities are wound down while new participants begin in the new defined-contribution schemes. The Netherlands' initiative is more challenging because the current plan's holdings will be transferred wholesale into one of the two new schemes offered.

The new scheme addresses both those issues by creating a more direct link between financial market fluctuations and the pensions, creating greater transparency for the participants. The Netherlands is ranked 2/44 of the OECD countries for their pension system.

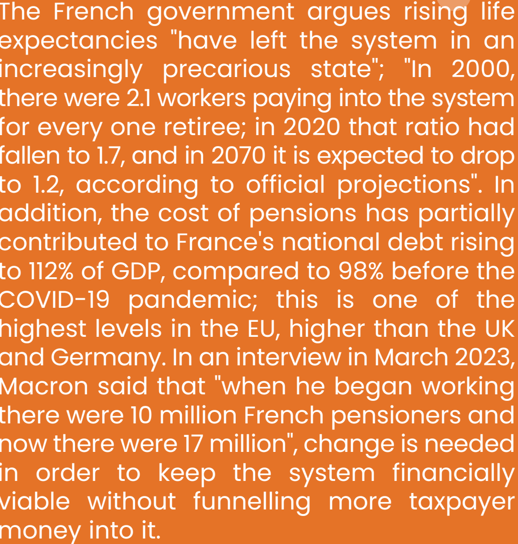
France

A series of protests began in France on 19 January 2023 with a demonstration of over one million people nationwide, organised by opponents of the pension reform bill proposed by the Macron government to increase the retirement age from 62 to 64.

Why are pensions such a political flashpoint in France?

The pension system is seen as the cornerstone of the country's cherished model of social protection. Unlike the market-led system of the UK, France has an unfunded pension scheme – whereby the working population pay mandatory payroll charges to fund those in retirement. All French workers get a state pension.

France has the lowest qualifying age for a state pension among the main European economies and spends a significant amount supporting the system. It appears this system, which has enabled generations to retire with a guaranteed, state backed pension, will not change. Compared to other European countries, France possesses one of the lowest rates of pensioners at risk of poverty, with a net pension replacement rate (a measure of how effectively retirement income replaces prior earnings) of 74%, higher than OECD and EU averages.



What's the problem

The French government argues rising life expectancies "have left the system in an increasingly precarious state"; "In 2000, there were 2.1 workers paying into the system for every one retiree; in 2020 that ratio had fallen to 1.7, and in 2070 it is expected to drop to 1.2, according to official projections". In addition, the cost of pensions has partially contributed to France's national debt rising to 112% of GDP, compared to 98% before the COVID-19 pandemic; this is one of the highest levels in the EU, higher than the UK and Germany. In an interview in March 2023, Macron said that "when he began working there were 10 million French pensioners and now there were 17 million", change is needed in order to keep the system financially viable without funnelling more taxpayer money into it.

United Kingdom

NEST (National Employment Savings Scheme) is a trust-based, defined contribution pension scheme. It was specifically established to support automatic enrolment and make sure all UK employers have access to a suitable pension scheme for their employer duties. NEST has been designed to be flexible and easy to use and allows workers to save more while they are working which reduces the burden on the UK government to support the old age pension system.

The scheme is not-for-profit and the Trustee has a legal duty to act in its members' best interests. It is designed to be straightforward and easy for employers to use. It is generally used by small employers who would not be interested in for-profit schemes as their contribution levels would not justify the administrative effort to setup and maintain individual accounts. NEST offers a low-cost way for people to put money away for their retirement.

What are the costs and charges of a NEST pension?

The NEST pension is free for employers, but employees have to pay some fees.

NEST members pay low charges, made up of two parts:

- a 1.8% charge on every contribution paid into their pot.
- a 0.3% annual management charge on the total value of their pot each year

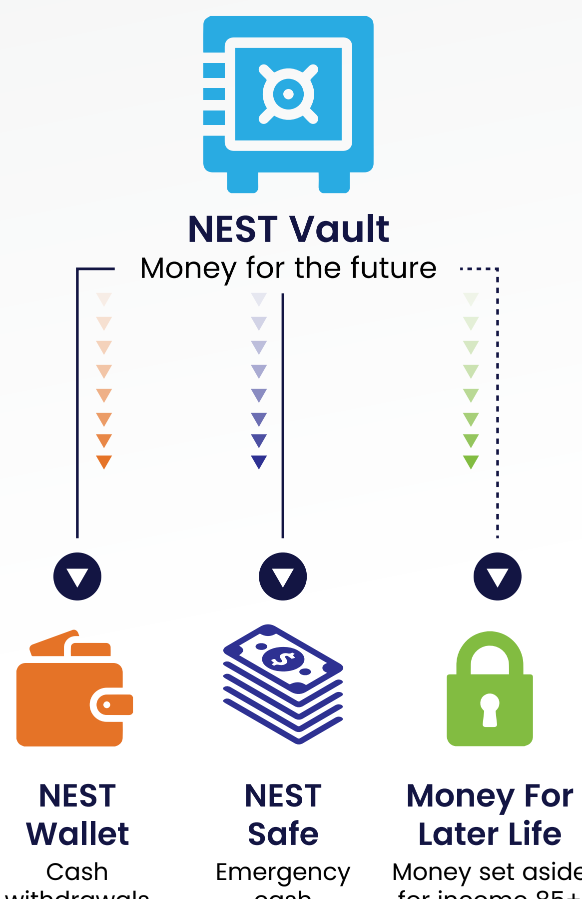
For example because there is a 1.8% fee on contributions, if you contributed £100 a month, £98.20 would go into your fund (and lets remember that there is 20% tax relief on this so it becomes £122.75).

NEST is hugely successful with over 10 million contributers, it is administered efficiently at low cost and offers the entire working population a safe pension savings structure.

NEST Guided Retirement Fund

At retirement, NEST helps retirees manage their money with their 'Guided Retirement' fund.

If for example you have more than £10,000 in your pot when you reach state retirement age, NEST will move you into the NEST Guided Retirement Fund. This fund allows members to stay with NEST beyond their intended retirement date and continue benefitting from potential investment returns while also being able to access some of their money. It aims to provide a stable and sustainable level of money which you can withdraw until age 85, leaving a separate pot that can be used to purchase a guaranteed income for life at that point.



***Your retirement pot is split into parts — each one is designed to invest differently in order to meet different needs throughout your retirement.**

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AN OVERVIEW OF GLOBAL PENSION CHALLENGES

United Kingdom

1. NEST Wallet

Money in your NEST Wallet is available for you to withdraw to assist with everyday expenses, regular bills or to spend in any way you wish. Every year up until you are 85, NEST will move money from your NEST Vault into your Wallet.

2. NEST Vault

The NEST Vault is divided into two parts. One part is invested in assets that are more likely to grow and is designed to provide money for future years' withdrawals until age 85. Money will be moved from the NEST Vault to the NEST Wallet annually until age 85, for this purpose. Money is allocated to the other part from age 65. This part is designed to provide a member with money to buy a guaranteed lifetime annuity from age 85 if they so wish.

The amount allocated from the NEST Vault to other parts of the fund is based on, among other things, the investment performance of a member's pot, how old they are, and when they join the fund. The NEST Investment Committee annually reviews the amount of cash available for members to withdraw from their NEST Wallet by using economic scenarios and long-term capital market assumptions prepared by Asset Managers. NEST aims to give members an amount that they can withdraw each year that is sustainable, while at the same time reducing the risk of them running out of money before age 85.

3. NEST Safe

This part is invested in very low risk assets and is designed to give members access to cash when emergencies and unexpected events arise. Ten per cent of members' initial pots will be allocated to the Safe for this purpose. If the investment performance of the Vault is particularly good in any year, bonuses will also be paid to the Safe.

Four Key Areas of uncertainty in retirement income provision

Firstly, some broad retirement issues countries are experiencing in sustaining adequate pension payouts as their old age populations continue to grow. Secondly we will review what products are available to retirees in order to provide retirement income for life. Lastly we will look at what products are available in the market.

We will first address the four key areas of uncertainty in retirement income provision.

1. Investment

The risk of earning less than expected on an investment account. This includes both: Insufficient growth net of fees as well as large losses near the start of retirement known as sequencing risk.

2. Longevity

The risk of living longer than expected.

3. Consumption

The risk of underestimating the amount of goods and services needed in retirement.

4. Inflation

The risk of unforeseen price increases of those goods and services. This covers both general increases in inflation of the goods and services as well as spikes in inflation.

There are principally three models of post-retirement income provision which can be delivered inside or outside of a DC plan:

- Cash lump sum, with no conditions placed upon its use
- Investment accounts that provide non-guaranteed income by making systematic withdrawals or from 'natural' income. This type can also include:
  - Post-retirement lifecycle/through retirement target date strategies/reverse target date funds (also called liquidation date funds)
  - Programmed withdrawal strategies and managed pay-out funds
- Longevity protection, including lifetime annuities, deferred annuities and risk pooling.

Australia

According to research company Rainmaker Information, Australian industry super fund members have between Aus$2 billion and Aus$3 billion in annuities, which means account-based pensions are about 13 times more popular.

Annuities have faced several challenges in the Australian market. But confusion about how they work particularly fears about running out of money, uncompetitive returns and deep apathy about planning for retirement income have hindered their growth.

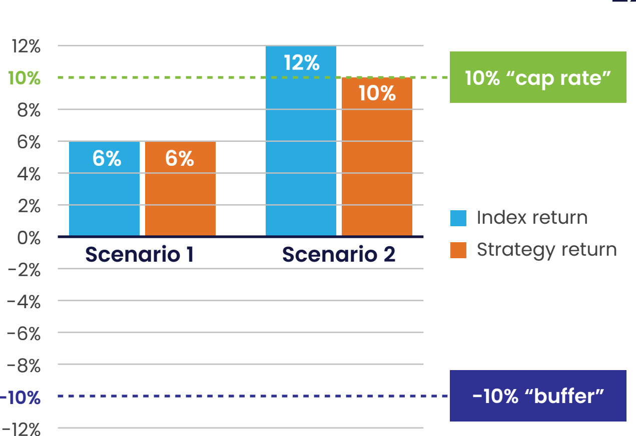
1. Indexed Linked Annuity (ILA):

Research from annuity data reports that the average issue age for all ILAs is 62. This suggests that people are employing these protections to buffer against portfolio losses in the "fragile decade." The fragile decade is the period from the last five working years through the first five years of retirement when sequence-of-returns risk may threaten a retiree's ability to outlive their savings. These are popular products in the United States and they are not currently widely available in Australia.

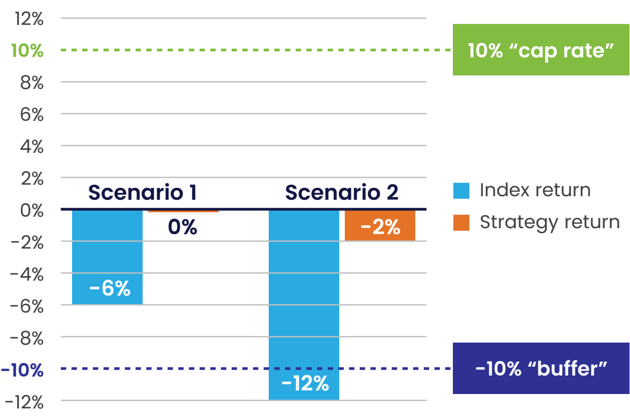
Developed over a decade ago, the index-linked annuity allows investors to benefit from market participation, while buffering against losses through a limit of, say 10%, meaning that the first 10% loss is covered by the insurer, and any losses beyond that are on you. Because they buffer against losses, index-linked annuities are also known as buffer annuities or also known as registered index-linked annuities (RILA).

The protections an index-linked annuity offers come with a trade-off. Folks seeking more protection via a higher buffer may sacrifice growth potential relative to the amount of risk they transfer to the company issuing the ILA. RILA is the rate of index linked annuity.

Example



The "cap rate" in this example is 10%, meaning you capture any growth up to 10%.
Scenario 1: Index return = 6% → RILA return = 6%
Scenario 2: Index return = 12% → RILA return = 10% ("cap rate" 10%)



The "buffer" in this example is −10%, meaning the insurance company will absorb losses up to −10%. Your account value is reduced when the negative index return exceeds the "buffer" percentage.
Scenario 1: Index return = −6% RILA return = 0%
Scenario 2: Index return = −12% RILA return = −2% ("buffer" −10%)

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Australia

2. Investment Linked Annuities

An investment-linked annuity is a lifetime income stream where your income payments are guaranteed to continue for life but the level of those payments varies over time to reflect the performance of the chosen investment option(s).

Example: In this example, the initial level of payment specified by the investment-linked annuity gets set based on the retiree's life expectancy at the time the annuity was purchased.

Example

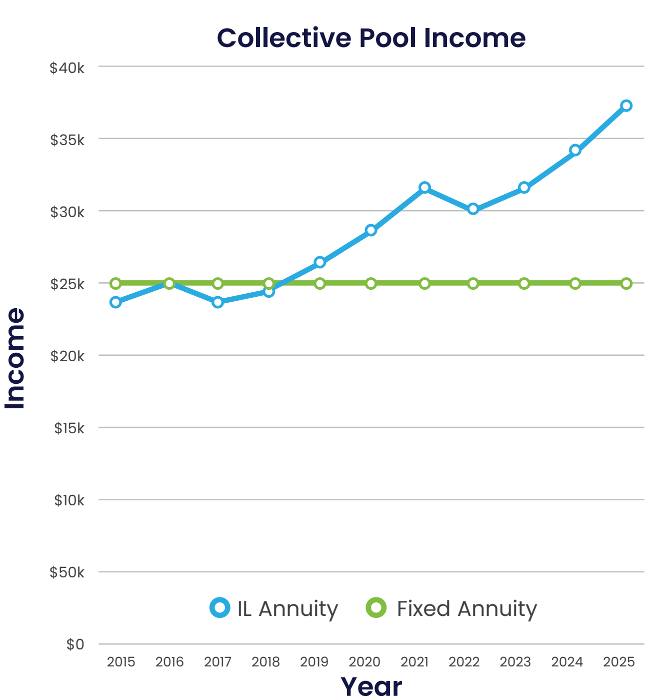
Account Value

Account Value

$900k
$800k
$700k
$600k
$500k
$400k
$300k
$200k
$100k
$0

2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025

Year



Annualised return – 5.5%

Investment Linked Account will vary based on the performance of the underlying investment. Assuming an annualised return of 5% the expected values would be:

- Year 1 - Account Value - $500,000
- Year 5 - Account Value - $600,676
- Year 10 – Account Value - $837,322

Fixed Annuity – 5%

The Investment linked annuity income is variable based on the performance of the assets. Assuming we have a life expectancy of 21.3 years our payment would be:

- Year 1 - $500,000/21.3 = $23,474
- Year 5 - $600,676/21.3 = $28,200
- Year 10 - $837,322/21.3 = $37,085

This represents a new breed of retirement income product in Australia. Investment-lined annuities provide longevity protection to ensure the retiree never runs out of money but also offer a choice of investments used to support that income. This design provides an opportunity to benefit from market returns over time. The longevity protection is provided by way of insurance.

Importantly, some investment-linked annuities offer death benefits, which aim to return the difference between what was put into the annuity and what has been paid out as cumulative income. Gone are the days when a policyholder would put $100,000 in and pass away three months later and nothing would be left to pay beneficiaries.

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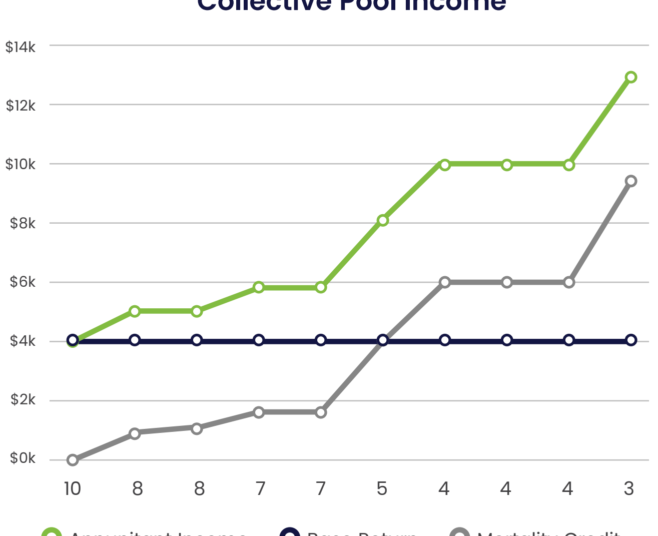
3. Collective pooled arrangements – Tontines

Tontines, which have existed for centuries as “last-person-standing” investment pools in which surviving members inherit the holdings of members who pass away.

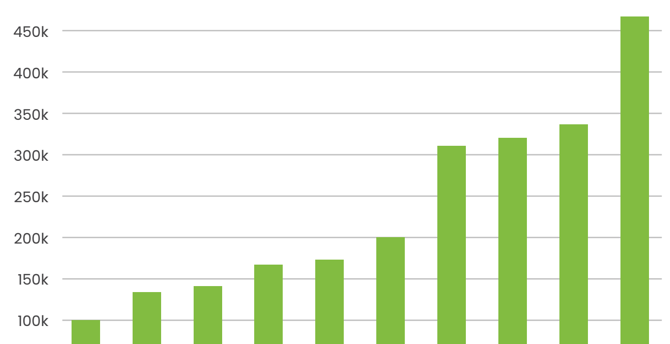
The central difference is that a tontine typically will not provide the income guarantee that an annuity can, but instead provides a higher average return, greater transparency, less complexity, and lower cost.

Example

Collective Pool Income



Modern Tontine 2042



Year

- Initial Investment $ 100,000 x 10
- Bond paying 4% of initial investment
- Base Return ($1,000,000*4%) = $40,000 / 10
- Mortality Adjustment ($4000/9) = $444

- Initial Investment $ 100,000
- Bond paying 4% of initial investment
- Fund is dissolved in 2042 and money distributed to surviving members

Different parties bear the risks if things do not go as predicted. If annuitants, as a group, live longer than expected, the insurer bears the costs through extended payments. If a pool of tontine members, as a group, lives longer than expected, the surviving members bear the costs through lower-than-expected payments.

In other words, annuities insure participants against systematic longevity risk, like an unexpected cure for cancer, but tontines do not. Similarly, with its income guarantee, the annuity provider assumes the risk of poor investment performance, while members of the tontine pool bear this risk
A key update from traditional tontines built into Modern Tontines is that only investors in a specific age group – for example those born between 1957 and 1961 – are eligible to participate in for example 2042 tontine fund.

And the Hybrid Tontine Series offers both income and pay-outs to surviving unitholders when the fund matures. Modern tontines are coming back in popularity in North America but there is currently no tontine style products available in the Australian market.

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Australia

4. Guarantee Minimum Withdrawal Benefits (GMWB) Variable Annuities

Longevity risk (the risk of outliving one's savings) became critical for retirees. Variable annuity (VA) with living and death benefit guarantees is one of the products that can help to manage this risk. It takes advantage of market growth and at the same time provides protection of the savings. VA guarantees are typically classified as guaranteed minimum withdrawal benefit (GMWB), guaranteed minimum accumulation benefit (GMAB), guaranteed minimum income benefit (GMIB), and guaranteed minimum death benefit (GMDB).

Annuities provide guaranteed income for a determined period in exchange for premium payments earlier in life. Some investors do not want to annuitize their account, but still want to withdraw from their annuity to cover their expenses. A guaranteed minimum withdrawal benefit (GMWB) rider offers the best of both worlds.

A guaranteed minimum withdrawal benefit rider is an add-on that you can purchase with your annuity. In most instances, these riders are paired with variable and fixed-index annuities. For an increase in annual expenses, you can withdraw a percent of your initial contribution amount every year. This is true, even if your account balance declines due to the performance of the underlying investments.

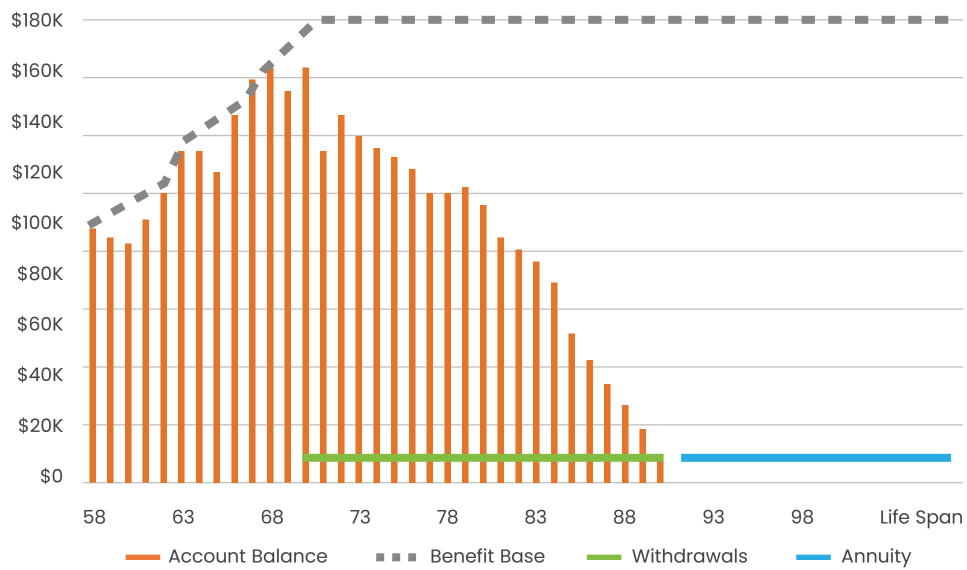
No Inflation protection | **Why would you add a GMWB Rider to your Annuity?**

A GMWB is an attractive option for retirees who do not want to annuitize their accounts. Annuitisation requires giving up your account balance in exchange for a guaranteed monthly payment for the rest of your life. This can be a wonderful deal if you live beyond your life expectancy, but financially disastrous if you die quickly after taking this option.

With a GMWB, you can withdraw a % of the benefit base for life (even if your accounts runs out) without affecting your ability to withdraw more, move your balance to another investment or leave the account to your estate.

GMWB Annuity Example

1. As your account value continues to make market gains your benefit base will increase which will results in a higher monthly income.
2. Once you activate your add-on you are guaranteed a minimum withdrawal amount for life based on your then account value.



Benefits:

- Popular savings instruments
- Guaranteed Minimum Withdrawal Benefit (GMWB) is the most popular VA rider.
- Downside income protection against investment risk
- Potential upside equity gain

If the investment performance is strong, policyholders will benefit.

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Summary

As the population continues to age, Australians run the risk of running out of money if they live longer than expected. Conversely, studies have shown that retirees who manage their pension lump sums tend to live more frugally than they should as they worry about running out of money.

The lack of annuitization makes older Australians heavily exposed to longevity, inflation, and investment risks. To protect retirees, Australia needs greater annuitization. It also needs new annuity products that stimulate consumer demand and public policies that encourage the annuitization of Superannuation balances. Greater annuitization would ease burdens on the government's Age Pension program by reducing the ability to spend down balances quickly to "double dip" and by reducing the number of individuals who deplete their savings.

Low levels of financial literacy

For many retirees' access to good financial advice can be hard to attain. There are lots of products and complex financial jargon. Nevertheless, workers will need some level of financial literacy to understand and manage their retirement accounts.

The industry needs to work hard to provide more transparent and free information to retirees in order to continue to act in their best interests and help them to maximise their retirement income.

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About Financial Risk Solutions Ltd (FRS)

The award-winning* InvestPro™ platform is relied on by blue-chip financial services and BPO clients to reduce operational costs, increase efficiencies and mitigate risk in the manufacture and management of investment products. More than 150,000 funds are managed on the Invest|Pro™ platform today.

Delivered cloud-hosted or on-premise, Invest|Pro™ securely automates multiple complex fund administration processes including unit-pricing, cash allocation and rebalancing; oversight and validation of operational activity performed by outsourced partners; and in Europe monitoring and reporting for PRIIPs, KID requirements, and Pillar III asset reporting for Solvency II.

FRS is part of the Constellation Software Inc. group and headquartered in Dublin, Ireland, with offices in London, Boston and Sydney.

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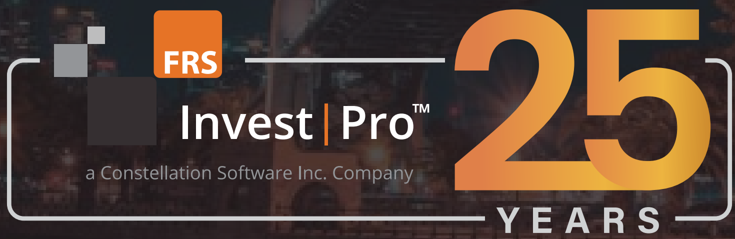

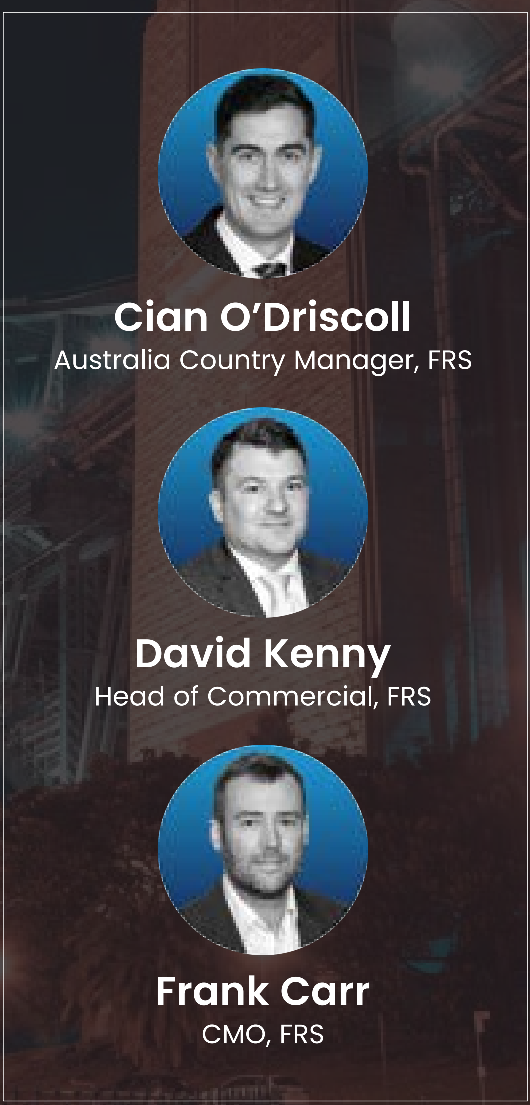

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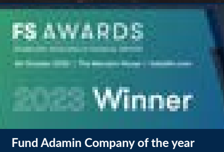

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