FRS Invest | Pro™

a Constellation Software Inc. Company

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

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IMPROVING PEOPLE'S RETIREMENT WITH TECHNOLOGY

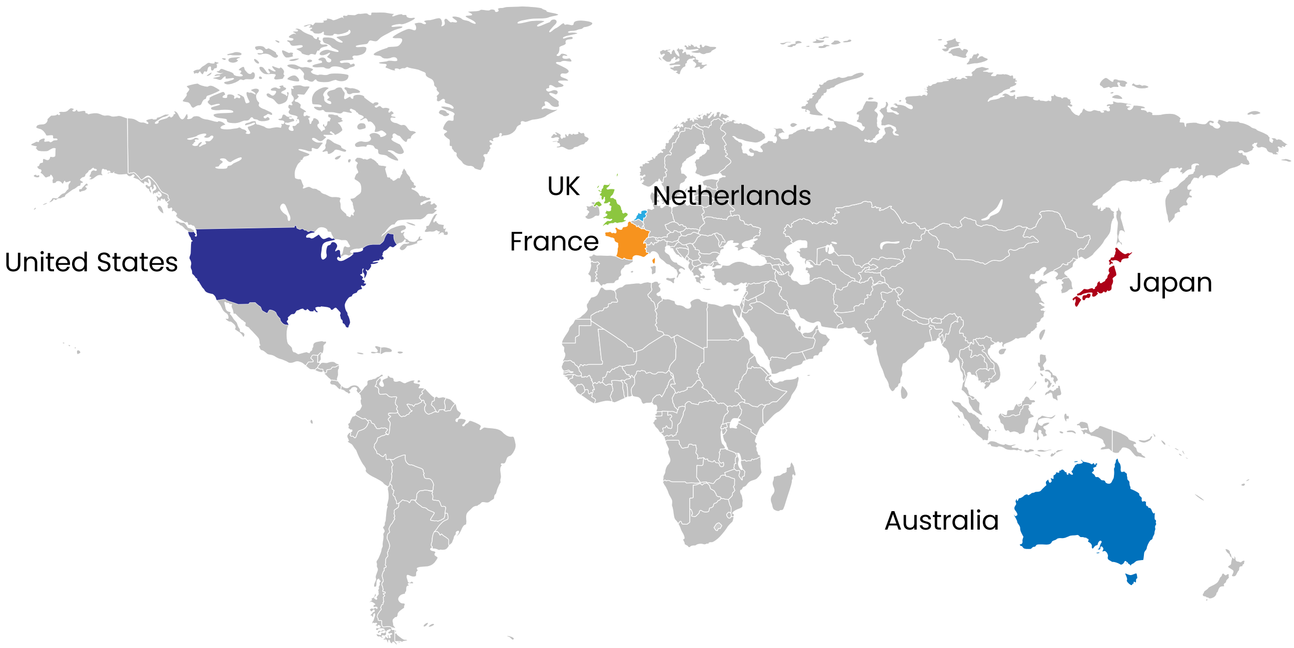
For the first time in human history, people aged 65 and over outnumber children aged five or younger.

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 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 contrasted with comparable programs in the U.S. 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.**

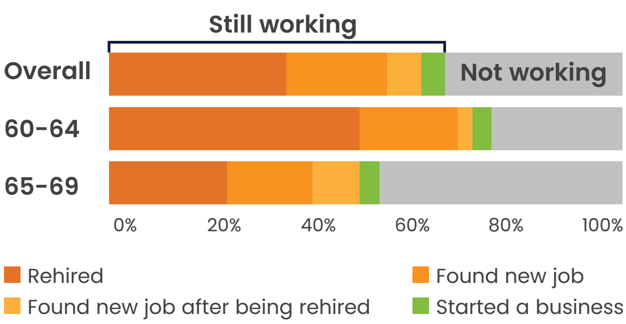
Japan

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?



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**

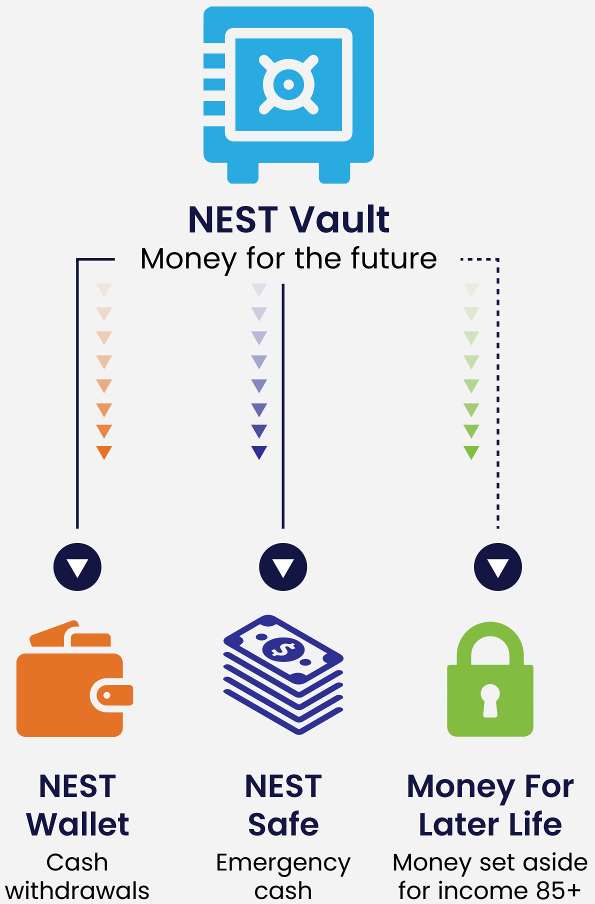
For example because there is a 1.8% fee on contributions, if you contributed £100 a month, £98.20 would go into your fund (and lets remember that there is 20% tax relief on this so it becomes £122.75).

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.**

Australia

Australian Superannuation Funds

Australian retirees have access to a 3-part program resulting from reforms that were undertaken in the 1990's. The government age pension is funded thru general taxes and generally not adequate to meet most basic living needs and it's also subject to means testing (income/ assets) and includes "work bonus" incentives to encourage delays in retirement.

The most significant part of the Australian system is the Superannuation, launched 31 years ago with both guaranteed and voluntary components. All employers with more than five employees currently make the guaranteed contribution at 11% of salary, increasing to 12% in 2025. Employees can make a pre-tax sacrifice of salary or direct contribution up to an annual cap of $27,500 from all pre-tax sources. Australians are also allowed up to 110K in a one-time, post- tax contribution followed by annual direct contributions of up to $6500.

Adoption of the Super was slow at first but the program has enjoyed wild success following the 2001 recession and today Superannuation funds own 36% of the ASX according to research company Rainmaker Information. The Supers are administered privately by asset managers and TPAs, with oversight from APRA and the Australian Tax Office. Even with the success of the Super, gaps still exist in the post retirement space and these tend to be addressed by some of the following retirement annuities:

- Index Linked Annuities, as in the United States have gained tremendous popularity among Aussies approaching retirement age. ILAs provide a buffer against portfolio losses in the "fragile decade," helping balance the sequence-of-returns risk in exchange for sacrificing some upside market gains. ILAs are also known as buffer annuities and frequently marketed as registered index-linked annuities (RILA)

- Investment Linked Annuities deliver 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). These provide longevity protection to ensure the retiree never runs out of money but also offer a choice of investments to benefit from market returns over time. The longevity protection is provided by way of insurance and some investment-linked annuities also offer death benefits

- Variable Annuities featuring GMxB riders with living and death benefit guarantees can help to manage a retiree's longevity risk (the risk of outliving savings) by leveraging opportunities for market growth while at the same time providing savings protection of an insurance contract. Guaranteed Minimum Withdrawal Benefit (GMWB) is the most popular iteration but variations including accumulation, income and death benefits all are being marketed

United States

United States

It is widely known that the US Social Security Program, started in 1935 faces constant adequacy & sustainability challenges, with nearly 50 million Americans drawing benefits today. Even with fixes to extend program funding, the benefit amount of as much as $43,000 is heavily offset by healthcare & housing security impacts. Pew Research estimates that an average of 25% of typical Americans' retirement income goes toward Healthcare and 35% of Americans do not own their home at retirement.

Private sector programs are crucial to bridging these gaps. The Employee Retirement Income Security Act of 1974 created several classes of tax deferred or advantaged retirement vehicles primary being 401(k) and IRA, with different iterations of each for specific employee groups such as labor unions, municipal workers and self-employed, including the enormous gig economy which has developed.

With Congress at an impasse over making any Social Security reforms whatsoever, SECURE 1.0 in 2019 and subsequently 2.0 in 2022 represent bipartisan compromise to address both adequacy and sustainability threats.

Some of the key provisions within SECURE include:

- Auto-enrollment with opt-out in ER-sponsored pension plans
- Increased ER & EE contribution limits to ERISA eligible investments including catch-up provisions for older workers
- Pushing out RMD ages thus forestalling the recapture of taxes
- Reducing pre-retirement leakage through emergency use loans & early withdrawals
- Expanded use of in-plan annuities that can generate guaranteed-income during retirement
- Tax credits and incentives to small employers to sponsor plans for EEs

American retirees also have a robust selection of retirement annuities to help provide financial security in retirement, including fixed, indexed and variable products that cover an entire spectrum of investment objectives. As in Australia, RILAs and fixed products have grown tremendously but the US insurance industry continues to launch innovative new products including fixed indexed, structured settlements, contingent deferred and investment only variable annuities.

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

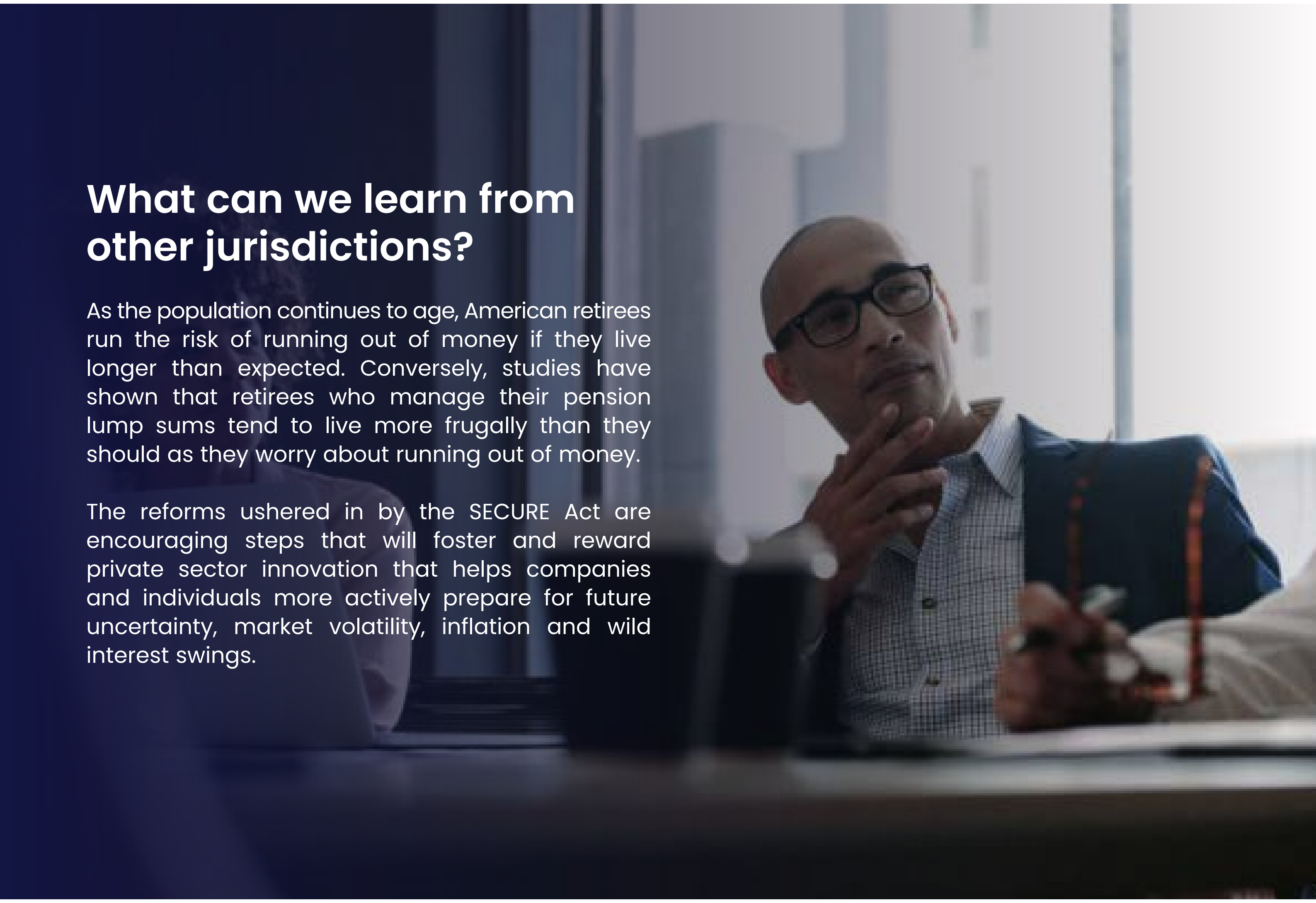
The risk of underestimating the amount of goods and services needed in retirement.

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.



What can we learn from other jurisdictions?

As the population continues to age, American retirees 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 reforms ushered in by the SECURE Act are encouraging steps that will foster and reward private sector innovation that helps companies and individuals more actively prepare for future uncertainty, market volatility, inflation and wild interest swings.

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.

More education across all age and income spectrums benefits all citizens and increases adoption and participation levels

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.

For more information visit frsltd.com or follow FRS on LinkedIn at www.linkedin.com/company/frs-ltd

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2021 - Xcellent Technology Award 2021 • 2020 - GRC Product of the Year - Asia Risk.Net Awards •
2020 - Pensions Technology Provider of the Year - Irish Pensions Awards •
2020 - Best Back Office Solution - • FundTech Awards 2020

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