THE ORFORD INITIATIVE

ANNUITIES ACROSS INTERNATIONAL RETIREMENT CONTEXTS

AUGUST 2020 REPORT

Written by Teagan Altschwager and Jody Evans

Acknowledgments

This report presents the findings of desk research and 6 interviews with representatives in different countries to understand the role that annuities play in their respective retirement systems.

This report is conducted as part of the Orford Initiative at Melbourne Business School. *'The Orford Initiative: Improving the retirement outcomes for Australians by optimising their retirement income and financial security'* is funded by the Orford Foundation in collaboration with the Melbourne Business School. The project team acknowledges the invaluable support of the Orford Foundation.

Please see the [Orford Initiative webpage]for further information on the background, motivations, and other research conducted as part of this project.

Project team

Dr Teagan Altschwager is Senior Research Fellow for the Orford Initiative at Melbourne Business School.

Dr Jody Evans is Associate Professor, Marketing at Melbourne Business School.

Research approach

The team adopts an engaged research approach to all projects. Engaged research is based on authentic partnerships with communities and organisations to craft a research program that creates value with and for communities or organisations and that has aligned academic outcomes.

Suggested citation: Altschwager, Teagan and Jody Evans (2020) *Annuities Across International Retirement Contexts*. The Orford Initiative: Melbourne Business School. Available at: https://go.mbs.edu/orford/

Acknowledgement of expert interviewees

The project team wish to acknowledge the following interviewees who shared their knowledge and expertise;

Eva Erlandsson – Senior Advisor, Insurance Sweden

Tove Foxman – Chief Economist, PensionDanmark

Associate Professor Marco Morales - Department of Economics, Diego Portales University

Richard Pauw – Manager Public Affairs, Pensioen Federatie

Professor Hato Schmeiser - University of St Gallen, Institute of Insurance Economics

Central Provident Fund Board, Singapore

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Executive Summary

This report provides an overview of the respective retirement systems in 6 top-performing systems globally, as indicated by the Melbourne Mercer Global Pension Index (Mercer 2019a). This report takes a closer look at these retirement systems with an interest in understanding why uptake of lifetime income streams is much higher in these countries. Recommendations are made for Australian companies and policy makers seeking to emulate the advances that have been made abroad.

Denmark has a multi-faceted retirement system with universal and means-tested public pensions, as well as two different occupational pension schemes. Key retirement products include lifetime annuities, term annuities and lump sums, each with unique tax treatments and regulations which heavily favour lifetime annuities.

The Netherlands provides a universal public aged pension with supplements for low income pensioners, as well as a broad coverage occupational pension scheme. Lifetime annuities are compulsory, however recent changes to policy will soon allow individuals the option to take a small lump sum withdrawal at retirement.

Switzerland has an earnings-related public pension system with a means-tested supplement, in addition to a mandatory occupational pension. Occupational pension savings can either be taken as a life annuity or as a lump sum, with annuities being the default product. Switzerland is one of the few countries globally that has a fixed nationwide annuity conversion rate.

Sweden has an incredibly intricate pension system; the public pension includes an notional defined contribution scheme (income pension), a defined contribution component (premium pension), and a guarantee pension supplement for low income pensioners. There are also occupational pensions, however they play a less substantial role. Annuities are compulsory across the Swedish system, however with varying degrees of choice.

Singapore has a unique retirement system in that it helps members set aside savings to meet their retirement, healthcare and home ownership needs. The predominant retirement system is a publicly managed defined contribution system called the Central Provident Fund. Life annuities are compulsory and also publicly managed through CPF (with three life annuity options to choose from).

Chile has a retirement system centred around mandatory contributions with the purpose of relieving government pension costs. Public pension systems are available for those with no (or little) pension savings, however are only eligible to the poorest 60% of the Chilean pensioner population. The key decision at retirement is whether (and how much) to allocate to an annuity versus phased withdrawals.

Three key implications are drawn to assist those seeking to emulate the advances that have been made abroad.

1. Consideration should be given to the role of government regulation, from the extreme end of compulsory annuitisation to softer 'nudges' of tax incentives and default products.
2. Broad communication efforts from industry and government have been demonstrated to enhance public buy-in.
3. People, culture and context play a pivotal role in framing a country's sentiments towards annuities.

Introduction

This report provides an overview of 6 top-performing retirement systems with an interest in understanding why uptake of lifetime income streams is much higher in these countries.

The *Melbourne Mercer Global Pension Index* is one of the preeminent evaluative tools from which international retirement systems are compared. Year on year, Australia has performed extremely well, and is consistently ranked within the top 5 globally for our retirement income system. Despite this, the Australian system is not without its flaws, and improvements can always be made. One such improvement, which has been widely debated in recent times, is a 'refocus' from accumulation activities (our superannuation system and other methods of savings) towards *how money is spent and managed throughout retirement*. One method of retirement savings management is through lifetime pension and annuity products. These products are not 'new' to Australia, but for a multitude of reasons have experienced very little uptake from the Australian population at large. This report seeks to understand *which countries* have had a more positive experience with regards to lifetime income streams, and *why* this might be the case.

Denmark and **the Netherlands** are both ranked as the two best countries globally in the 2019 Melbourne Mercer Global Pension Index, each with an Index Value of >80 (A Grade) (Mercer 2019a). Within the B grade list (index value of 65-75) there are particular countries in which lifetime income streams play a significant role; **Switzerland, Sweden, Singapore, and Chile** (Mercer 2019a). These 6 countries have been selected for further exploration.

This report takes a closer look at these retirement systems with an interest in understanding why uptake of lifetime income streams is much higher in these countries.

Desk research was undertaken in addition to consultation with expert representatives from each country, to provide an overview of the retirement system in each country, the role that annuities play and the level of demand for this type of product, as well as a brief overview of the competitive landscape, rationale for the strength of annuities in each country, and current challenges faced.

Recommendations are made for Australian companies and policy makers seeking to emulate the advances that have been made abroad.

Summary of strengths and challenges

In reviewing the various retirement systems, common strengths and challenges were found.

STRENGTHS

History: Annuities in Denmark and Sweden both benefited from a history of defined benefits; by having prior experience with a system that provided retirement income, the Danish and Swedish people have familiarity with the concept of lifetime pensions which may place annuities in a more favourable light.

Culture: The Danish culture exhibits a high level of trust in institutions, with the belief that systems are generally in place to protect me. The Dutch culture is rather traditional and conservative, with importance placed on the collective over the individual. The Swiss culture also tends to be financial conservative and risk averse. These cultural characteristics make these countries more open and receptive to the premise of annuities.

Communication: In Denmark, considerable efforts are made from government and pension funds to communicate the benefits of annuities. In Singapore, the Central Provident Fund went through a strategic transition to compulsory annuities with strong communication campaigns to aid in public understanding.

Regulation: In Sweden, annuities are compulsory. They are also compulsory in Singapore, and the government provides risk-free interest rates that strengthen retirement incomes. Annuities are compulsory in the Netherlands (inheritance taxes might also deter individuals from wanting to leave a bequest). In Switzerland, annuities are the default product for pension funds, who offer attractive and *government fixed* conversion rates. In Chile, there are various restrictions on gaining access to savings, and charges imposed on phased withdrawal products, making annuities more appealing.

CHALLENGES

Low interest rates: An issue faced globally, interviewees from Denmark and Switzerland spoke of the pressures a low interest rate environment on their pension systems. In Denmark, pension funds are mitigating these issues by offering annuities as 'market rate' products which impose greater investment risk on the individual but allow funds to take more aggressive investment strategies. In Switzerland, low interest rates (as well as the government fixed annuity conversion rate) have led to solvency concerns for pension schemes.

Inadequate savings for some groups: The retirement savings structures across many of these countries are designed with those in secure and stable employment top-of-mind. However, adequate pension savings are hard to achieve for the self-employed (Netherlands, Switzerland), migrants or non-residents (Netherlands), low-wage or part time workers (Netherlands, Sweden, Chile), who are not well covered by occupational schemes.

Social assistance: Poverty levels in retirement are particularly troubling in Sweden and Chile, with increases in social assistance required.

Life expectancy and age pension age: Pension systems globally are facing additional strain due to increasing life expectancy. This is particularly problematic for systems like Switzerland where public pensions are paid through intergenerational PAYG payments (where they suffer from both an ageing population and a reduced younger workforce). There is support across all countries for an increased retirement age aligned with life expectancy.

Denmark

Retirement System Overview

PILLAR 1: PUBLIC PENSION	
1.1 'Folkepension' - Universal basic public pension financed by general taxes on a PAYG basis.	DKK 77,028 ($17,134 AUD) per year (Ministry of Employment 2020)
1.2. 'Pensionstillæg' - Means-tested pension supplement.	DKK 85,464 ($19,016 AUD) per year (for single people and half that amount per head for cohabiting people) (Ministry of Employment 2020)
PILLAR 2: OCCUPATIONAL PENSION	
2.1. Arbejdsmarkedets Tillaegspension (ATP), a large-scale defined contribution (DC) scheme based on mandatory contributions. This is paid on the basis of how much you work. - For all Danish employees who work more than nine hours a week, based on fixed sum contributions.	- 92% of Danes make contributions to ATP - Maximum payout is DKK 24,500 ($5,327 AUD) per year (ATP 2020) - Employee pays one third of the contribution, the employer pays two thirds (ATP 2020).
2.2 Compulsory occupational pension schemes or 'labour market pension schemes'. - Tax subsidised and set up by collective agreements between social partners (Oxera 2014).	- Covers about 90% of the employed work force (OECD 2019a), (self-employed persons excluded) (Pedersen 2020). - Contributions from 12% for low-income to 18% for high-income workers (Sørensen et al. 2016).
PILLAR 3: VOLUNTARY PILLAR	
Voluntary DC schemes - Tax subsidised pension arrangements, inaccessible until retirement, from insurance companies, pension funds and banks (SGI 2019)	- Approximately one third of Danes have a private pension (European Trade Union Institute 2017)

Denmark

Retirement System Overview

Pillar 1 of the Danish pension system includes universal and means-tested state pensions which ensure an adequate basic income (Danish Insurance Association 2012) and provide a solid protection against poverty (Anderson 2016). While some income-tested supplements are intended for only the most financially disadvantaged pensioners, it is estimated that 90% of pensioners still receive the *pensionstillæg*, which is income tested (Sørensen et al. 2016). As the system matures it is expected that private pension schemes will become the principal income for Danish retirees (Pedersen 2020).

In pillar 2, there are two key savings schemes. First, the **ATP** supplements the pillar 1 objectives of ensuring basic income irrespective of labour market contributions (Danish Insurance Association 2012). It also plays an important role for people who experience unemployment or spend time out of the workforce on parental leave, as their contributions are paid *in double* by government, municipalities, or unemployment insurance during this time (Gérard 2018; OECD 2019a; Columbia Threadneedle 2016). This increased rate is to partially offset the fact that contributions are not made to occupational pensions during periods out of the workforce (OECD 2019a). Contributions to the ATP are quite small (on average 1% of earnings), and only contributes to a small replacement rate (approximately 7% on average for those who have been in employment for over 40 years), however they can be an important source of income for those with low occupational pension savings (Gérard 2018). Currently 40% of Danish pensioners rely solely on their state pension and ATP (ATP 2020). While individual payments are quite small, collectively the ATP is of substantial economic importance, holding 889bn DKK (over $194bn AUD) in pension assets (ATP 2020).

The second savings scheme in pillar 2 is **occupational pensions**, and has an objective of increasing retirement income and achieving higher replacement rates for individuals (Danish Insurance Association 2012; SGI 2019). This is achieved for different income levels as contribution rates into the occupational pension scheme increase from 12% for those with lower earnings up to 18% for higher income groups (Columbia Threadneedle 2016).

The third pillar consists of voluntary savings, either through additional pension arrangements or other forms of savings (SGI 2019), with the objective of covering special retirement needs and desires (Danish Insurance Association 2012).

The current public retirement age is 66, however is subject to gradual increases in response to increased life expectancy – to 68 in 2030 (OECD 2019a) and – expectedly – to 69 in 2035 (Tove Foxman - PensionDanmark). Access to each pension pillar of the retirement system general occurs at (or near) this retirement age.

Denmark

Annuities: their role and demand

Annuities play a very large role in the Danish retirement system. For ATP contributions, a mandatory lifetime annuity is paid directly from this scheme (PPI 2014; OECD 2019a). For occupational pensions (and voluntary pension schemes), there are three options for how pension savings can be used in retirement, each with unique tax treatments and regulations;

(1) Lifetime annuities - Particularly favourable tax treatments apply for lifetime annuity contributions (Oxera 2014), as contributions are fully tax deductable without limits (Pedersen 2020).

(2) Term annuities - contributions are also tax deductable but only up to DKK 57,200 ($12,522 AUD) per year (Ministry of Taxation 2020).

(3) 'Aldersopsparing' – (formerly a 'lump sum' option) a non-tax-deductible option, adhering to a TTE tax regime (they are not tax deductible contributions, however they are exempt from tax when paid out), and can be paid out as an annuity, in fixed instalments or as a lump sum (Tove Foxman - PensionDanmark).

Annual contributions are also capped at either DKK5,300 or DKK50,200 ($1,179 or $11,166 AUD) depending on age (Ministry of Taxation 2020).

These tax incentives and contribution caps have resulted in very high annuitisation rates and low uptake of lump sums (Oxera 2014);

"Labour market pension schemes covering the private labour market are flexible, you can choose freely what you want to do, but you are encouraged – through default settings. Public servants have to use the larger part of their pension savings for annuities. And this is backed by tax regulation… the tax rules only allow you to make full deductions for money going into annuities; pension savings going into fixed instalment schemes [term annuities] have a cap… and lump sums are not deductable at all. So the tax structure in itself gives you an incentive to save for annuities, because otherwise your contribution deductions are capped." (Tove Foxman - PensionDanmark)

Research consistently indicates that lifetime annuities are the dominant product choice (~50% savings allocated), followed by 35-40% in fixed-term annuities and 10-15% in lump sums (PPI 2014; Oxera 2014; Tove Foxman - PensionDanmark). As well as the regulatory and tax benefits (Oxera 2014), the preference for annuities could also be attributed to the ability for individuals to make annuity decisions earlier while they are accumulating their pension savings (PPI 2014).

Danish consumers can maximise their pension income in retirement by staying in the workplace for longer. Transition to retirement arrangements are available where the individual reduces their hours and supplements their income by commencing part of their annuity payments (Tove Foxman - PensionDanmark). State pensions can also be deferred in return for an increased pension rate for life (OECD 2019a).

Denmark

Annuities: their role and demand *continued*

While there does not appear to be great opportunity to tailor retirement income product attributes beyond how much is allocated to them, there are embedded insurance schemes within pension funds that allow for bequests (although this does vary according to the pension fund);

"There are insurance schemes embedded within the pension scheme which gives you the opportunity to, if you die before you reach retirement age then the money you have saved in the fund goes back into your inheritance, and you can buy an insurance as part of the pension scheme so that if you die very young – when you haven't built up much of a portfolio yet – then this is topped up by insurance money from the pension scheme… The white-collar schemes typically have children's pensions embedded, but blue-collar schemes very often do not." (Tove Foxman - PensionDanmark)

In addition, inheritance motives can be fulfilled by allocating more to fixed-term annuities, which have the capacity to be transferred to a spouse or dependent upon the individual's death;

"We encourage [our customers] to make their fixed instalments work as an annuity, but the point is the part of the pension which you have as fixed instalments can be passed on as inheritance, annuities of course you cannot, they die with you – but the fixed instalments you can pass on. Our customers think this is a very nice way of doing it, they're quite certain they will have money enough for a long life, and they can still pass something on to their kids." (Tove Foxman - PensionDanmark)

Denmark

Competitive landscape of the retirement system

"The entire pensions wealth in Denmark at the moment is roughly 2 times GDP" (Tove Foxman - PensionDanmark). Annuities are offered by the majority of occupational pension funds, with the exception of banks (Oxera 2014);

"The only companies providing pensions that are not allowed to provide annuities are the banks – they can only provide fixed instalment schemes or lump sum schemes. But the larger banks own pension companies which are allowed to offer annuities as well." (Tove Foxman - PensionDanmark)

Individuals generally do not choose what occupational pension scheme they use for pillar 2 contributions (Oxera 2014), rather this is determined by the relevant social contract covering particular companies and industries (Tove Foxman - PensionDanmark). Rules around pension access are generally determined by the individual pension scheme (PPI 2014), with some companies prohibiting lump sums entirely (Oxera 2014).

The pension market has seen considerable consolidation over the years, with *"6-10 large labour market pension companies in operation, depending on how you define the concept"* (Tove Foxman - PensionDanmark). Pension companies can take various corporate profiles; *commercial companies* (affiliates of banks or insurance companies), *non-profit companies*, and *member-owned pension funds and limited companies*. These companies account for 40% (commercial) 25% (non-profit) and 35% (member-owned pension funds and limited companies) of total annual contributions respectively (Pedersen 2020).

Denmark

Strength of annuities

In addition to the taxation and regulatory structures that incentivise larger allocations in lifetime annuities (Oxera 2014), annuities are strong in the Danish market due to the **historical role** that defined benefits have played;

"Annuities play a very large role for different reasons. One is the historical setting – when labour market pension schemes were set up in the 1990s, they were modelled over pension scheme for state/ municipality employers which is a DB system - without underlying contributions. DB system in its nature is an annuities kind of thinking, and because that was what the pension savings schemes (with defined contributions) was growing out of I think the annuities way of thinking was embedded in the pension schemes from the start. And because the pension schemes are agreed between the social partners they have a more paternalistic way of thinking than the individual pension saver would probably have – so they defined from the outset that a substantial part of the pension savings should be used for annuities." (Tove Foxman - PensionDanmark)

In addition, considerable effort has been taken between government and pension funds to **communicate the benefits** of annuitisation to Danish consumers;

"Because these pension schemes cover such a wide part of the population, the government and the pension companies together have been able to explain to people that annuities are not a way of cheating you out of your own money, annuities are a way of ensuring you as an individual against the risk of poverty which comes with the uncertainty about how long you are going to live. And Danes believe this; they don't think they are being robbed of their own money when they pay money into an annuity scheme – they understand this concept that I don't know for how long I'm going to live, and I need the security of knowing I will have funds for whatever length of life I will experience." (Tove Foxman - PensionDanmark)

Other research has acknowledged the strong role that cooperative efforts between government, pension funds and social partners in educating and engaging consumers through seminars, advice, and industry-wide website pensionsinfo.dk – a system to which all companies must contribute their information, in order for customers to view their savings and insurance with a view to assist them in making retirement decisions (Columbia Threadneedle 2016; Pedersen 2020; Oxera 2014).

Finally, from a cultural perspective there seems to be a perceived **social responsibility** to adequately save for retirement (Columbia Threadneedle 2016), an inherent trust from individuals in their pension funds, that annuities are in place to protect them financially and provide security;

"I think people understand the paternalistic point of view: The annuity system protects me against the result of my own foolish actions. They might not formulate it that way, but I believe that's part of the explanation of why annuities are so widely used in Danish pension schemes." (Tove Foxman - PensionDanmark)

Denmark

Present challenges

Despite being consistently the highest (or top 2) rated pension system globally (Mercer 2019a), no system is without areas for improvement. For example, Tove Foxman (PensionDanmark) spoke of the implications (faced globally) of a **low interest rate environment** on pension investments and tax incentives, issues which are exacerbated by increased life expectancy. One particular response Denmark has taken to this issue is the transition from pension schemes with *guaranteed benefits* to *unit-linked or 'market rate' arrangements* which impose greater investment risk on the individual (Pedersen 2020). While this means that pension payouts may fluctuate according to investment returns, this transition is beneficial as guarantees force pension companies to overly conservative in their investments;

"As rates of return on investments started going down that put limitations on pension companies with high guarantees, because in order to be able to live up to this guarantee they had to put their balance into very secure financial vehicles where there were no risk of losses… That way of providing pensions is undergoing alteration so that all new pension schemes in Denmark are now market-rate, which means that [the individual bears the investment risk]." (Tove Foxman - PensionDanmark)

Pension companies employ various strategies to mitigate **investment risk**, including smoothing payments and retaining savings buffers to ensure relatively stable benefits over time (Pedersen 2020). Another strategy is to alter the composition of assets as people age, with riskier investments while people are young and moving to more conservative options as people near retirement (Tove Foxman - PensionDanmark).

Finally, the interplay between **pension savings and state pension** is also seen as a challenge, as some may be disincentivised to save for their own retirement as doing so excludes them from means-tested state benefits (Jensen et al. 2019). Tove Foxman (PensionDanmark) explained that a new system has been introduced in the past 2-3 years to mitigate this issue;

"The Danish pensions savings up 'till a few years ago was purely an ETT system: Contributions were exempt, whereas returns and pay-outs were taxed (and taken into account in the means testing of public pensions). As a result, high income earners have always had a strong tax incentive to save for pensions, whereas low and middle income earners at best had no incentive and in some cases a rather strong tax disincentive to save for pensions. This owing to the fact that for high income earners marginal tax rates are higher at the time of contributing and lower at the time of pay-out, whereas for low and middle income earners (combined) tax rates are typically lower at the time of contributing than at the time of pay-out. This system was modified in 2017-18 - Especially for low and middle income earners, tax deductions for pensions contributions were raised. And an element of TTE has been introduced – especially with regard to contributions made during the last five years up to the official retirement age. Combined these two elements have provided low and middle income earners with a stronger tax incentive to savings for pensions than before 2017." (Tove Foxman - PensionDanmark)

Netherlands

Retirement System Overview

PILLAR 1: PUBLIC PENSION	
1.1. AOW: Universal state pension (Oxera 2014), financed by general taxes on a PAYG basis (Sørensen et al. 2016).	- AOW Monthly income: living alone = €1,201.42 ($1,945.00 AUD); married/living together = €822.62 ($1,331.75 AUD) (SVB 2020) - Deductions to pension income for every year someone has lived abroad (Oxera 2014)
1.2. AIO: Supplement guaranteeing a fixed minimum income for low-income pensioners (Sørensen et al. 2016).	- Qualify if you do not receive any/full AOW pension, and little/no other income (SVB 2020) - Maximum monthly net amount: living alone = €1,184.26 ($1,918.74 AUD); married/living together = €1,606.88 ($2,603.48 AUD) (SVB 2020)
PILLAR 2: OCCUPATIONAL PENSION	
Workplace pensions system where most workers save into industry-wide multi-employer schemes (Columbia Threadneedle 2016). - Includes industry-wide pension funds, corporate pension funds, and funds for independent professionals (e.g. medical specialists, dentists) (Oxera 2014).	- Average contributions of 18% of gross wage (Gérard 2018) - Contributions made by the employer (two thirds) and employee (one third) (Gérard 2018). - Covers 91% of employees through industrial agreements (OECD 2019b). - *"Contributions differ between companies and schemes, but it is common to have 2/3 of the premium paid by the employer and 1/3 paid by the employee. It is also related to income – but in most companies I think it's about 20-25%, but there are also companies now where you have over 40% of premiums"* (Richard Pauw – Pensioen Federatie).
PILLAR 3: VOLUNTARY PILLAR	
Voluntary DC schemes (Sørensen et al. 2016) and personal pension schemes from insurance companies (SGI 2019).	- Limited contribution to retirement income (Gérard 2018).

Netherlands

Retirement System Overview

Pillar 1 of the Dutch pension system is the **AOW universal state pension** (Sørensen et al. 2016) with an objective of providing basic income (Richard Pauw – Pensioen Federatie). The AOW matches changes to the legal minimum wage (Columbia Threadneedle 2016); 70% of minimum wage for a single, 50% per person in a couple (Gérard 2018). A supplement payment (AIO) is also available for low-income pensioners, as well as additional tax credit (Sørensen et al. 2016). Eligibility for AOW requires residency rather than work-related conditions;

"[The AOW] differs from most other countries because it provides a basic income for everybody who resides in the Netherlands, so you do not have to necessarily work but you have to be a Dutch resident." (Richard Pauw – Pensioen Federatie).

Pillar 2 includes occupational schemes, set up by various collective agreements with the intention of supplementing the AOW (SGI 2019). Historically pillar 2 has predominantly offered defined benefit (DB) schemes with some defined contribution (DC) offerings (Sørensen et al. 2016), as well as 'collective DC schemes' (a hybrid of DB and DC) (Oxera 2014). CDCs have gained popularity as they combine the collective pension model intrinsic of DB schemes, while also shifting the risk from the pension fund (Oxera 2014). However, the system in the Netherlands is currently going through a period of transformation away from DBs and towards more DC elements (OECD 2019d).

"We are making a shift from defined benefit to defined contribution schemes, but also in the future collective schemes, mandatory participation and risk sharing are still very important, so we are not making the shift to individual DCs… the transition to the new system will take place in the next few years, the system needs to be implemented in 2026." (Richard Pauw – Pensioen Federatie).

There are generally no credits or contributions made to occupational pension schemes for persons out of the work force due to child raising or unemployment periods, however schemes often allow voluntary contributions during child raising years (OECDb 2019).

Pillar 3 includes **private pensions** and savings schemes, however contributions are quite limited (Gérard 2018). This is problematic given that private pensions are an important retirement savings vehicle for the self-employed;

"The third pillar is very important for self-employed people. That's a big debate in the Netherlands – perhaps to force the self-employed mandatory participation is a bridge too far, but politicians agree that there is an accident waiting to happen with the retirements of the self-employed." (Richard Pauw – Pensioen Federatie).

The Dutch pension system achieves a higher than OECD average replacement rate of 80% (based on full-career average wage), paired with the lowest OECD poverty rates in the 66+ age cohort at only 3.1% (OECD 2019d). The current age of retirement in the Netherlands is 66 and 4 months, increasing to 67 in 2024 (OECD 2019c). Further increases after 2024 will be calculated based on life expectancy gains (OECD 2019b);

"After [2024] each increased life expectancy by one year will result in an 8 month increase of the retirement age, instead of a rise in one year." (Richard Pauw – Pensioen Federatie).

Netherlands

Annuities: their role and demand

It is compulsory to take funds accumulated through the occupational pension as a life annuity (Oxera 2014). There is a *trivial commutation* option whereby those who have only accumulated a very small pension amount can withdraw it as a lump sum; similar conditions apply for DB equivalents (Oxera 2014). Historically cash withdrawals have been prohibited (Gérard 2018) but recent changes to policy will soon allow individuals the option to take a small lump sum withdrawal at retirement;

"Pension benefits in the Netherlands must be lifelong, otherwise they are not even perceived as pensions, so annuities and lifelong payments play an enormous role… There is an act coming up later this year that 10% of your accrued pensions can be paid out as a lump sum at retirement. The rest needs to be a lifelong annuity." (Richard Pauw – Pensioen Federatie)

Funds are generally specific to a company or industry-wide (OECD 2019b), meaning that individuals have little choice regarding the pension fund to which they contribute. Social partners are involved in choosing the pension fund to represent the sector, and the ministry of social affairs identifies all relevant companies that correspond to that fund;

"About 70% of workers have pensions in industry wide pension funds, they are mandatory for the employer, and indirectly also for the employee, but it's necessary that social partners need to be representative – so, if there is enough support for mandatory participation, social partners can go to the ministry of social affairs, and the ministry makes the pension scheme mandatory for all the employers that fall within that scope. So employees in the Netherlands do not have freedom of choice when it comes to the pension fund they go to". (Richard Pauw – Pensioen Federatie)

However, there are several annuity options at retirement. First, there are joint or individual life insurance and pension options (Oxera 2014). There is also the possibility for a 'high-low construction' annuity where income is higher for the first few years of retirement (Oxera 2014; Richard Pauw – Pensioen Federatie).

Finally, Richard Pauw (Pensioen Federatie) spoke of two recent changes to annuity options; the introduction of the 10% lump sum, and the ability to select a lifelong variable annuity versus a lifelong fixed annuity, which gives more control over investments in a low interest rate environment. The variable annuity is seen as likely to yield the greater pension benefit, however the lifetime fixed annuity is still the default product for funds;

*"We used to have only **lifelong fixed annuities**, and that can be a complete disaster if you have to buy an annuity at an interest rate of 1% or even lower – we saw negative interest rates in Europe last year. So under the new law you can have **lifelong variable annuities** as well, and that means you keep a part of your assets, investments – you keep on investing, and you don't have to transfer your entire capital at one moment in time to buy an annuity… but what is interesting is that the default option is still a fixed lifelong annuity. From an economic perspective we know, especially with an interest rate that is very low, that a variable annuity will get you a better pension benefit in the end , but 90% of people choose the default".* (Richard Pauw – Pensioen Federatie)

Netherlands

Competitive landscape of the retirement system

Occupational pensions span industries and cover multiple employers (Mercer 2019a). The three core types of funds include industry-wide pension funds, corporate pension funds, and funds for independent professionals (e.g. medical specialists, dentists) (Oxera 2014). Life insurers are also active in this pillar in providing annuities (Oxera 2014). Accrual and payout have traditionally been handled by the same company given the DB history of Dutch pension schemes, however as the market changes to include more DC and CDC schemes there may an increase of member movement between funds;

"It is very common that the pension fund manages the accrual phase and also the payout phase, so it's not like you have the capital and then afterwards you go to an insurance company, that's not really common…. but there are some company funds that have DC schemes now, and they say 'we only want to offer the variable annuity', and if people want a fixed annuity the pension company fund says 'okay you want a fixed annuity, please go elsewhere. Go to an insurance company, because we only want to offer you this product'. I think you will see that more in the future, but it's not common now because of the traditional DB schemes and not having a distinction between the accrual phase and the payout phase." (Richard Pauw – Pensioen Federatie)

Richard Pauw (Pensioen Federatie) explained that *"the institutional landscape has changed over the last decade"* in pillar 2; first, in addition to the three traditional types of pension funds plus insurance companies, there are two new institutions; *general pension funds* and *pension premium institutions;*

"General pension funds can be established by anyone, so by insurance companies, they are real pension funds with a board but they also cannot make a profit – but there's one big difference with traditional pension funds, general funds can 'ringfence' their assets, so the fund does not have to form one financial whole or collective, general pension funds can work for several financial rings, that makes it easier to work for several schemes – what you see now is that the older and smaller funds can be liquidated, and they go to a general pension fund… We also have premium pension institutions, they are also growing quite rapidly, and they are not real pension funds because they are not allowed to bear biometric risks but they are interesting for hardcore individual DC savings." (Richard Pauw – Pensioen Federatie)

Second, the number of providers has decreased via consolidation in response to increased regulation and a desire for cost reduction and economies of scale (Gérard 2018).

"We used to have more than 1000 pension funds but that number is declining rapidly, and a lot of consolidation is taking place driven by a wish for cost reduction but also because of the high standards that the members of the board of the pension fund have to live up to. The Dutch Central Bank also tests whether board members are worthy enough for their position or function." (Richard Pauw, Pensioen Federatie)

Given that funds generally cover entire industries, sectors or multiple funds, the industry is heavily concentrated (Gérard 2018).

"If you take those 5 big funds then I think you have about 70% of all the assets under management of pension funds – so the top 5 is really big compared to the rest." (Richard Pauw – Pensioen Federatie)

Netherlands

Strength of annuities

Richard Pauw (Pensioen Federatie) attributed the strength of annuities in the Netherlands to the **culture**; the Dutch tend to be traditional and conservative regarding finances, with importance placed on the collective over individual choice;

"I really think it's just a cultural thing because we – we make the comparison with the UK a lot in the Netherlands. In the UK you can even take 100% of your pension benefit as lump sum in the UK. We consider it to be a bit awkward/funny that people buy a convertible car. We are more paternalistic.–in the Netherlands I think we are quite proud that we have no poverty among the elderly… I think it's really cultural, more Protestant, 'don't spend too much, not too much bling. You will need your money later." (Richard Pauw – Pensioen Federatie)

"We are quite traditional in the Netherlands I think when it comes to freedom of choice but like I said it has a good reason because it would be easier to have freedom of choice in a truly individual system but we do not have that… we think it's really important to have risk sharing and we have a really collective system." (Richard Pauw – Pensioen Federatie)

In addition, the Dutch seem to have a preference for the **simplicity of lifetime income**;

"I think most people in the Netherlands just think: 'I want my pensions and my retirement income taken care of, and I don't want to be bothered too much'." (Richard Pauw – Pensioen Federatie)

Finally, there are various **inheritance taxes** that might deter individuals from wanting to leave funds to family; these taxes are contingent upon the value of the estate and relationship to the deceased individual, ranging from 10% for smaller amounts to partners and children, up to 40% for large amounts left to more distant relatives (Oxera 2014).

Netherlands

Present challenges

Several challenges have been raised. First, there is an issue of **inadequate pension levels** available for some Dutch citizens. For example, in the state pension system Richard Pauw (Pensioen Federatie) raised that "*migrants, because they haven't resided in the Netherlands their entire lives, they often do not have an optimal state pension.*" In the occupational pension system, there are also issues regarding balances accumulated for those working part-time, particularly women who also experience shorter careers and lower wages on average in the Netherlands (OECD 2019d). The self-employed are not required to contribute to an occupational pension, which can put them at a severe disadvantage in retirement (OECD 2019d).

Second, Richard Pauw (Pensioen Federatie) raised issues concerning the **implementation** and communication of the major transition taking place towards DC schemes in pillar 2; the transition is anticipated to cost €60 billion (over $97 billion AUD), with uncertainty of who will cover this cost.

"The transition [to DC] is a really big issue because we are willing to make the transition to the new system, and it's important that we do, but it comes at a pretty great cost… Now the big debate is 'who is going to pay for it?' – the government will not pay €60billion to make the transition. The transition costs highly depend on the interest rate. Employer and employee organisations are not going to pay the bill, but pension funds do not have the money… the funding ratios are too low, we don't have any buffers, but we still want to make that transition before 2026." (Richard Pauw – Pensioen Federatie)

In addition, there's also the issue of **communicating** the rationale of the new system to the public and maintaining trust throughout the transition.

"Even if everything is from an actuarial perspective 'fair', do people perceive it to be fair? And do people even want to go to the new system, can we convince them. Perhaps legally you will be able to say 'you do not have a choice' you have to go or fiscally you can do all kinds of things to make the transition possible, but that doesn't mean that you have the trust of society. That's our biggest challenge." (Richard Pauw – Pensioen Federatie)

Finally, there is continuing debate about the level of **choice and control** that should be given to individuals regarding pensions and retirement products (SGI 2019). This debate is centred around the younger generation who have voiced a preference for flexibility and control (Oxera 2014). Richard Pauw (Pensioen Federatie) explained that one area of debate is the possibility to withhold pension premiums to better allow people to enter the housing market;

"There are a lot of young people who have difficulty buying their first home, and they're paying quite a lot of money for their pensions. So, there are some political parties that say it needs to be possible to stop paying your pension premiums for 5 years if you want to buy your first home or you have small children - so there is a debate going on. Should you be able to have more freedom of choice in the accrual stage? But the big difficulty with that, is that we also want risk sharing." (Richard Pauw – Pensioen Federatie)

Switzerland

Retirement System Overview

PILLAR 1: PUBLIC PENSION	
- Earnings-related public pension including a minimum pension (Mercer 2019a) with a progressive formula (OECD 2019e) - Means-tested supplement for those who are not entitled to the minimum pension (SGI 2019). - Financed through taxes on PAYG basis (Oxera 2014).	- Minimum payment = CHF 1,185 ($1,768 AUD) per month; Maximum = CHF 2,370 ($3,536 AUD) for an individual and CHF 3,555 ($5,304 AUD) for married couples (Credit Suisse 2020).
PILLAR 2: OCCUPATIONAL PENSION	
- Mandatory defined contribution (DC) occupational pension system (Mercer 2019a) - Collective negotiation of pension plans by stakeholders (Oxera 2014). - Applicable to all Swiss citizens earning over CHF 21 150 ($31,523 AUD) per year (OECD 2019e)	- Contributions are 50% paid by employer, 50% paid by employee (Oxera 2014). - Contributions rates start at 14% and rise to 36% as the individual approaches retirement (Oxera 2014).
PILLAR 3: VOLUNTARY PILLAR	
- Voluntary pension plans and private savings offered by insurance companies and banks (Mercer 2019a; Oxera 2014)	- Important for the self-employed who are not covered by occupational schemes (Oxera 2014). - Comparatively small to other pillars (Oxera 2014) - Some savings provide tax advantage, but are capped and inaccessible until 5 years before retirement (Oxera 2014)

Switzerland

Retirement System Overview

Pillar 1 of the Swiss pension system is the state pension, with the objective of guaranteeing a basic income (SGI 2019). The state pension is an earnings-related system, with a positive relationship to individual income (OECD 2019e). In order to receive the maximum pension payout, an individual needs to have consistently made contributions into the system for 43-44 years (even during periods of unemployment) and earned an average income of CHF 85,320 ($127,186 AUD) per year (Credit Suisse 2020). Periods of not making contributions to the state pension system – due to unemployment, time spent abroad, studying – create 'contribution gaps', which reduce pension entitlements by 1/43 for women and 1/44 for men per year (Credit Suisse 2020). People who take time out of work for parenting or caretaking receive credits which offset their decrease in contributions (Credit Suisse 2020). Pension payouts include upper and lower limits, with redistribution from those with high incomes to low incomes (OECD 2019e). Supplementary benefits are also offered to low income individuals (OECD 2019e).

Pillar 2 is a mandatory occupational pension system applicable to all Swiss citizens earning over CHF 21 150 ($31,523 AUD) per year (OECD 2019e), and includes survivors pension for spouse and/or children as well as disability insurance (Oxera 2014). Pillar 2 is dominated by defined contribution schemes (Oxera 2014). Equal contributions are made by employers and employees, and are proportional to income (SGI 2019). Contribution rates increase by age, but are subject to contribution caps (The Geneva Association 2018). Additional contributions can be made on a voluntary basis by individuals and are tax deductible (Gérard 2018). During times out of the work force (for example for having children) contributions are not made (OECD 2019e).

Voluntary private pensions and savings are intended as a supplement to the first two pillars, in particular, for the self-employed who are not covered by any occupational pension scheme. They are also important as a tax-efficient investment and savings vehicle (Oxera 2014). Tax deductions apply to yearly savings up to CHF 6768 ($10,087 AUD), however this cap is much higher for the self-employed (SGI 2019). Pensions and savings amounts cannot be accessed until 5 years before the pension age (OECD 2019e). Since Pillars I and II combined are the principal sources of retirement income, Pillar III is comparatively small (Oxera 2014).

The current age of retirement is 65 for men and 64 for women (SGI 2019). Early retirement is possible from 63/ 62 in both pillars 1 and 2 but at a reduced income (OECD 2019e). The objective of pillars 1 and 2 are to achieve a replacement rate of 60% (Gérard 2018).

Switzerland

Annuities: their role and demand

Annuities play a large role in the Swiss retirement system. Savings accumulated in the occupational pillar are taken as a life annuity or a lump sum, with annuities being the default product (Oxera 2014).

"They play a large role because the first column, most of the second column and also the third column typically go into an annuity. The way these annuities are designed, if you die early they also provide payments to your heirs – particularly your partner and children. I think that's a common trait. So it's not just a personal annuity… I would say for most people in Switzerland the asset that you hold here, which goes into an annuity is the largest asset that you typically have. I would say that on average people hold around 0,5 million *swiss* francs [$0.75million AUD] at the age of 65 in the second column, and if you transfer that to an annuity that gives you something like 30,000 swiss francs [$45,000 AUD] *per year."* (Professor Hato Schmeiser - University of St Gallen)

While annuities are not strictly compulsory, there are limitations with how much an individual can withdraw as a lump sum; this varies across different providers, however retirees are usually entitled to at least 25% as a lump sum (OECD 2019e);

"Well, the lump sum you are limited there. In the second column, you cannot just take out everything. It is typically limited to 50%, so you can take 50% as a lump sum and 50% goes into an annuity, that would be your option. The idea is that for example if you find out that you have reduced life expectancy that you are not stuck in that annuity, you can take some money out. Or also for any other reason, but you cannot take everything out because of course the state wants to avoid that you take all the money out and you have the problem that maybe you run out of money later on, and then it's the problem of everyone. So, that is regulated." (Professor Hato Schmeiser - University of St Gallen)

Lump sum withdrawals also require an application process years in advance of receiving the money (Oxera 2014). Life annuities have a fixed nationwide conversion rate of 6.8% (OECD 2019e), offering a generous conversion rate and certainty for Swiss pensioners (Oxera 2014). As a result, the annuitisation rate is generally very high, estimated around 80% (The Geneva Association 2018; PPI 2014).

"If you look at the contribution over the systems which goes into annuity, some of course use that money for financing their house and so on, but it's the majority of the whole money which goes into annuity, so we're talking probably 80-90%." (Professor Hato Schmeiser - University of St Gallen)

Annuities are also available in the third pillar, but given the vast coverage of the occupational pension system and attractive fixed rates, this market for annuities is incredibly small (PPI 2014).

The only other level of 'choice' available for individuals is early and deferred retirement options; early retirement is possible from 58, and deferral is available until 70 (OECD 2019e). Those opting for early or deferred retirement income receive a modified conversion rate according to how early or late they choose to retire; generally, a reduction of .15-.2 percentage points is incurred per year of early retirement, compared to an increase of 0.2-0.25 percentage points per year of deferral (OECD 2019e). There are also possibilities for combining pension income and employment (a transition to retirement style of arrangement) (OECD 2019e).

Switzerland

Competitive landscape

Pillar 2 occupational pensions are generally linked to specific employers or (sub)industries, meaning there is typically little option for an individual to choose to change between pension schemes (Oxera 2014). Pension funds will often manage both the accumulation and payout phases (including offering annuities themselves), but smaller funds may collaborate with life insurance companies (Oxera 2014). In 2014 there was estimated 2000 pension funds in Switzerland (Oxera 2014), Professor Schmeiser (University of St Gallen) explained that a significant number of mergers over recent years have caused that number to decrease to approximately 200, in addition to 8-10 main insurance companies. Given the coverage of the occupational pension system and the embeddedness of life annuities therein, annuities in the private market are virtually non-existent (Oxera 2014). In 2018, active members contributed CHF 26 billion and employers contributed CHF 30 billion to pillar 2 pension funds (Federal Statistical Office, 2019), with almost CHF 900 billion in total assets (Federal Statistical Office, 2020).

Strength of annuities

The preference towards annuitisation has been attributed to various factors; first, the fact that annuities are the **default option** of occupational pension funds (Oxera 2014); second, the attractive and fixed annuity **conversion rates** (PPI 2014); third, **cultural attitudes** of being financially conservative or risk averse (Oxera 2014; PPI 2014).

"I'm not sure if [the Swiss] really like it, this has in a way been a political decision to install such a system. Because the majority of it is a compulsory system, and typically if you have additional money of course you can do additional payments with these incentives of being tax deductible, so I think people typically use that – make additional payments because of these incentives. And that you can also actually take that money out as a lump sum if you did additional payments you can take that out as a lump sum later on for example to finance your house. I think that's an attractive part; if they would not be there I'm not sure people would say 'okay I'd really like to buy annuities'." (Professor Hato Schmeiser - University of St Gallen)

Professor Schmeiser commented that more broadly the strength of the Swiss annuity system – considering pillar 1 state pensions also as annuity payments – is the fact that system 1 and 2 demonstrate **diversification** and thus protect the Swiss people from risk in different ways;

"Switzerland decided to have quite a large compulsory annuity system, and they started with a pay as you go scheme, the first [pillar], and they were very smart in finding out much earlier than others that this system will go into difficulties simply because we have demographic changes. We have so much fewer young people which are needed to finance the annuities for the retirees. So they installed this second [pillar] as a savings system… they did that quite early in the 1980s and nowadays there's quite a lot of money in it. They tried to go for diversification because they know that in the second column the problem is the capital market – that is the important risk factor, and the first one it's the demographic developments." (Professor Hato Schmeiser - University of St Gallen)

Switzerland

Present challenges

Switzerland faces several retirement system challenges. First, there are **demographic** challenges from an increasing ageing population (OECD 2019f) which particularly influences pillar 1 given that it is financed through intergenerational payments (PAYG) (SGI 2019). In the absence of major reforms, government reserve funds for buffering the public pension are projected to be exhausted by the 2030s (OECD 2019f). Suggested strategies to sustain the first pillar include reducing payments to retirees (not a popular option: Professor Hato Schmeiser - University of St Gallen), or increase the retirement or state pension age (Mercer 2019a), thereafter linking it to life expectancy (OECD 2019f).

The second issue regards **low pension balances** for particular groups. Self-employed individuals are not covered by occupational pensions, leading to a much higher risk of financial vulnerability in retirement (OECD 2019f). While voluntary private pensions are available in pillar 3, self-employed people are not mandated to contribute to their retirement savings (Oxera 2014).

The third issue is the **sustainability** of the high and fixed annuity conversion rate; in a low interest rate environment, paired with increased life expectancy, there are growing solvency concerns (PPI 2014);

"When it comes to annuities – there are solvency problems… there are quite a lot of pension schemes which are in difficulty because if you look at the present value of their liabilities and the current present value of their assets, their solvency ratio doesn't look good. However, if they cannot pay out – then the question pops up 'what will happen?'." (Professor Hato Schmeiser - University of St Gallen)

In discussing how pension funds combat solvency issues in the short-term, Professor Schmeiser described certain funds and government support that may be available. However, there are various contingencies and complexities surrounding this; for instance, in an isolated incident or problems arising for a small number of pension schemes, funds could be provided to offer support – this level of support would not be feasible for industry-wide issues. Another mechanism for addressing solvency problems is for pension schemes to charge additional premiums to their members;

"The pension schemes are allowed to charge additional premiums when they are in difficulty – there's regulation of how much they can [charge] in order to get to a particular solvency level again, but they charge additional payments to employees and companies." (Professor Hato Schmeiser - University of St Gallen)

These challenges have been discussed for some time in Switzerland, but an overarching challenge is the difficulty in actioning change due to the political process of passing reforms (OECD 2019f). Various reforms around retirement age and annuity conversion rates have been posed in recent years and have been rejected through referendum (The Geneva Association 2018). Professor Schmeiser spoke of the implications of pension reform by popular vote;

"The younger people would have interest and say okay that should be reduced, because it's a wealth transfer to my disadvantage, but for the old people it's good to stay the way it is… So this is not in a way fixed to some capital market data, or to mortality rates, its indeed something that people can vote on, and you think probably of your own pocket." (Professor Hato Schmeiser - University of St Gallen)

Sweden

Retirement System Overview

PILLAR 1: PUBLIC PENSION	
1.1. Income Pension (Inkomstpension) - Earnings-related benefits financed for the most part on a PAYG basis (Gérard 2018); *Notional Defined Contribution scheme* (Sørensen et al. 2016).	- 16% of pensionable income allocated to the income pension (Swedish Pensions Agency 2020) - Contributions from both employers and employees (approximately 60/40%) (Swedish Pensions Agency 2019) - Individual pension contribution includes income thresholds and caps, and are tax deductible (Swedish Pensions Agency 2019).
1.2. Premium Pension - Defined contribution (DC) component (Gérard 2018) - Contribution of 2.5% of pensionable income (Swedish Pensions Agency 2020)	**Premium pension:** - 6.1 million premium pension savers in 2019 (Swedish Pensions Agency 2020) - Market value for fund operations (all funds) was SEK 1,485 billion (over $232 million AUD) in January 2020 (Swedish Pensions Agency 2020)
+ Guarantee pension supplement for low income-based pension; includes housing supplements and elderly financial support (Swedish Pensions Agency 2020)	SEK 8,076 ($1,301 AUD) per month for a single pensioner, and SEK 7,204 ($1,160 AUD) for a married pensioner in 2018; payments reduced for those with earnings-related pension (Swedish Pensions Agency 2019). - In January 2020, 703,000 pensioners received guarantee pension (with or without income pension); 285,000 received the housing supplement, and 22,700 received old-age support (Swedish Pensions Agency 2020)
PILLAR 2: OCCUPATIONAL PENSION	
Occupational pensions: - Compulsory, collective insurance DB and DC schemes set up by collective agreement (Sørensen et al. 2016).	- Covers over 90% of employees (OECD 2019g). - Paid by employers and employees (Sørensen et al. 2016; Eva Erlandsson - Insurance Sweden). - DC contributions depend on Income Pension (pillar 1.1) earnings cap; for employees under the earnings cap, contribution levels are 4.5%; for employees above the cap, the contribution level is 30% (Sørensen et al. 2016).
PILLAR 3: VOLUNTARY PILLAR	
- Voluntary DC schemes (Sørensen et al. 2016) and private savings in a bank or through insurance companies (Swedish Pensions Agency 2020)	- Previous tax benefits for making contributions to private pensions; from 2016 this tax-deductions only applies to the self-employed (European Commission 2018).

Sweden

Retirement system overview

Pillar 1 of the Swedish pension system is the national public pension, which comprises of two key parts. The first and dominant part is the **notional defined contribution income pension** (‘Inkomstpension’), with an objective of achieving a base replacement rate relative to the average wage (Sørensen et al. 2016). The second, supplementary part is the **premium pension – an individual defined contribution scheme** (Sørensen et al. 2016). For those with children under four, the government pays contributions for one parent to both elements of the national public pension system (income pension and premium pension) (OECD 2019g). Unemployment, sickness, and disability benefits are also deemed pensionable income; the government pays the ‘employer contribution’ into the individual’s pension accounts (Swedish Pensions Agency 2020; OECD 2019g).

“For most people pillar I is the major part of the pension payments even though payments from pillar II are increasing in importance.” (Eva Erlandsson - Insurance Sweden)

The national pension system is also a form of pension insurance, with the purpose of redistributing funds from people who live a shorter life, to support those who live longer (Swedish Pensions Agency 2019). ‘Inheritance gains’ (the balance from those deceased) are redistributed to those in the same birth cohort (Swedish Pensions Agency 2019). Pension funds from the National pension scheme are available from age 62 (as of 1 January 2020, previously 61), and will be increased incrementally to 64 by 2026 (OECD 2019g).

A **means-tested Guarantee pension** is also available to those with low retirement pension income (Sørensen et al. 2016). This is accessible from age 65, and requires 40 years of residency in Sweden between the ages of 16-64 to receive the maximum benefit; for those who have spent less time in Sweden the pension benefit is reduced proportionally, with a 3 year residency minimum (OECD 2019g; Swedish Pensions Agency 2020).

Pillar 2 is an **occupational pension** from employers (Swedish Pensions Agency 2020). Occupational pension schemes are slowly moving from defined benefit (DB) to defined contribution (DC) arrangements (Sørensen et al. 2016). The second pillar plays a less substantial role in Sweden as pillar one provides a significant replacement rate; instead, this pillar helps high income workers (who earn above the pillar 1 income threshold) to further increase their pension income (Sørensen et al. 2016). This is achieved by increased contribution rates depending on income; those earning below the pillar 1 income threshold typically contribute 4.5%, and those earning above contribute 30% (Sørensen et al. 2016). Occupational pensions also generally include health insurance and survivors’ protection to beneficiaries (Swedish Pensions Agency 2020). The occupational pension does not cover those who are self-employed or work outside occupational pension sectors or arrangements; they are encouraged to compensate for this through private savings (Swedish Pensions Agency 2020).

Pillar 3 is **private savings and pensions**. Historically there were tax benefits for making contributions to private pensions (pillar 3), from 2016 this tax-deductions were eliminated apart from self-employed individuals (European Commission 2018).

Sweden

Annuities: their role and demand

Annuities are compulsory across the various pillars of the Swedish system, with varying degrees of choice.

"Within the compulsory pillar I all payments are lifelong annuities… Within pillar II and III you can (at present – changes to longer payment periods are discussed) choose a 5-year payment period instead of lifelong. There is no possibility for a lump sum payment in either system". (Eva Erlandsson - Insurance Sweden)

In the pillar 1 income pension, an individual receives a life annuity at retirement with income calculated based on their retirement age, accumulated notional capital, and life expectancy (Gérard 2018; OECD 2019g). The level of choice within the income pension pillar is minimal, meaning consumer demand cannot be determined; individuals can choose to retire later (increasing their pension payments), or can make partial withdrawals (25, 50, 75% of the total pension), which can also be received while working (transition to retirement) (OECD 2019g).

In contrast, premium pension provides individuals with much more choice regarding how their funds are invested during accumulation. While annuities are still mandatory in retirement, individuals have a choice of a standard/guaranteed annuity or a variable annuity in retirement (where the funds can be further invested, however no income value is guaranteed) (OECD 2019g). Of the 6.1 million premium pension savers in 2019 (Swedish Pensions Agency 2020), AP7 (2020) reports over 4 million invest in AP7 Såfa. This government regulated fund is the default for when consumers make no active choice, therefore active decision making versus default behaviour cannot be distinguished.

The pillar 2 occupational pension provides even more choice at retirement; individuals can choose a lifelong annuity, and often this is the default option, payment periods of 5, 10, 15, or 20 years are also available (Swedish Pensions Agency 2020).

"According to taxation law, early access of occupational pension is possible from the earliest at the age of 55. Most schemes follow this except for the scheme covering those employed by the state. Their earliest age is 61 years." (Eva Erlandsson - Insurance Sweden)

Often lifelong annuities are the default option for providers (Swedish Pensions Agency 2020), and indeed lifelong annuities as well as 20 year fixed-term annuities are the most popular (Bovenberg et al. 2015). According to Eva Erlandsson (Insurance Sweden), *"It has been discussed to increase the payout phase within pillar II and III from the present minimum of 5 years to a longer period. I believe most consumers prefer lifelong annuities or longer payout phases within pillar II."*

Historically there were tax benefits for making contributions to private pensions (pillar 3), however from 2016 this was eliminated except for the self-employed (European Commission 2018). 38% of Swedes aged 20-64 participated in tax-deducted private pension savings in 2011, and while the pension payments resulting from pre-2016 contributions will continue to be significant for the next few decades, it is anticipated that this part of the pension system will diminish in its importance (only working from a tax perspective for the self-employed who elect to make these contributions) (European Commission 2018).

Sweden

Competitive landscape of the retirement system

Different providers service each element of the Swedish retirement system.

For pillar 1 income pensions, there are four autonomous national pension funds to which contributions are paid (Gérard 2018). Contributions are allocated equally into each of these four 'buffer funds' (Swedish Pensions Agency 2019), and are subject to various investment rules and requirements to protect pension balances (OECD 2019e).

For pillar 1 premium pensions, individuals can select particular funds in which to invest their money, or they resort to the default government fund called AP7 Såfa (Swedish Pensions Agency 2020). Premium pension funds (both default and selected funds) are managed by the Premium Pension Agency (PPM), who also manages balance fees and charges and ensures funds keep their administrative costs to a minimum (Gérard 2018). AP7 Såfa adjusts the investment profile of the pension account according to the individual's age to maximise investment growth, whereby younger people incur higher risk options and those near retirement are assigned more conservative investments (Swedish Pensions Agency 2020). At the end of 2018, individuals could select from over 800 funds within the premium pension system (Swedish Pensions Agency 2019). Due to heightened fund requirements and restrictions imposed by the Swedish Pension Agency, only 553 funds remained in January 2019 (OECD 2019e), and further reduced to 484 active funds in January 2020 (Swedish Pensions Agency 2020).

There are only four major pillar 2 occupational schemes (OECD 2019g). Membership to one of these schemes is determined by where you work (municipalities and regions), whether you are a government or privately employed worker, and whether your employer participates in a collective agreement (some employers have their own occupational pension solution or equivalent) (Swedish Pensions Agency 2020).

Pillar 1 payments (income pension, premium pension and guarantee pension) are still the largest contributor of payouts to Swedish pensioners in 2019, however pillar 2 occupational pensions are growing in importance (Insurance Sweden, 2019).

"Payments from the different pillars were as follows in 2019 (SEK): Pillar I: 339 billion; Pillar II: 97 billion; Pillar III: 89 billion; Total: 526 billion." (Eva Erlandsson - Insurance Sweden).

Sweden

Strength of annuities

A defining attribute of the Swedish retirement system is the **compulsory** nature of annuities throughout each of its major pillars. Even in pillar 2 where shorter fixed-term annuities are possible, lifelong annuities are the provider default (Swedish Pensions Agency 2020) and are the most popular product (along with the longest duration fixed-term annuity of 20 years) (Bovenberg et al. 2015). One possible explanation for this preference is the historical context of defined benefit schemes.

Similar to Denmark, Sweden has a well-established history of DB pensions (particularly in pillar 2), which has only in the 2000s shifted to a DC approach (Bovenberg et al. 2015). Therefore, the Swedish population still have ongoing **familiarity** with the concept of lifetime pensions provided through DB schemes, which may subsequently put lifetime annuities in a more favourable light.

Present challenges

According to Eva Erlandsson (Insurance Sweden), *"The major challenge within the Swedish pension system at present concerns the **level of pensions**. For some the pension level is too low due to few years with income or a very low income"*. This is somewhat expected given that Sweden has undergone major pension system reforms in recent years; the full strength of the pension system will only be realised once the system has matured (Bovenberg, Cox & Lundbergh 2015).

Similarly, Sweden has considerably more retirees living at or below the poverty line compared to similar Nordic countries (e.g. Denmark and Norway) (SGI 2019). Again, this is partly a result of a recently **reformed pension system**; as the system matures people will have longer periods to accumulate through the new pension structures, and will less likely rely solely on guaranteed pensions and social welfare supplements. In the short term at least this situation warrants further attention, either by increased government support, additional contributions to boost pensions for those nearing retirement with low balances, or incentives for private savings. Mercer (2019a) advocates for the reinstatement of tax incentives for private contributions.

Finally, increases to pension age (currently in progress) are also recommended to keep up with increasing life expectancy (Mercer 2019a), and will mean that individual pensions will be higher due to actuarial calculations and longer time in the workforce to accumulate funds (Gérard 2018; OECD 2019g).

Singapore

Retirement System Overview

PILLAR 1: PUBLIC PENSION	
The **Workfare Income Supplement (WIS)** scheme tops up the salaries of lower-income workers and helps them save for retirement. The **Silver Support Scheme (SSS)** provides additional cash supplement to elderly Singaporeans who had low incomes through life and now have little or no family support.	- **WIS**: Provides cash and CPF payouts up to $4,000 SGD ($4,133 AUD) per year to eligible older lower-wage workers (Workfare 2020). - **SSS**: Provides cash supplement of up to $900 SGD ($928 AUD) per quarter to eligible elderly Singaporeans from 2021 (Silver Support 2020). - Both WIS and SSS are administered by the CPF Board
PILLAR 2: OCCUPATIONAL PENSION	
The Central Provident Fund is a publicly managed defined contribution (DC) scheme (Oxera 2014), comprising of multiple member accounts to cover a broad range of expenses including retirement savings, healthcare, homeownership (CPF 2020).	- Contribution of 37% for members age 55 and below (CPF 2020). - Both employees and employers make monthly CPF contributions (CPF 2020).
PILLAR 3: VOLUNTARY PILLAR	
Individuals are encouraged to supplement their retirement income from CPF with private savings (CPF 2020)	- CPF members can voluntarily top up to their own or their loved ones' CPF savings through the **Retirement Sum Topping-Up Scheme** to build up their retirement savings (CPF 2020). These voluntary contributions are tax-advantaged on an Exempt-Exempt-Exempt basis – the contributions qualify for tax relief, and the interest earned and withdrawn amounts are exempted from tax.

Singapore

Retirement System Overview

The predominant retirement system in Singapore is a publicly managed defined contribution system called the Central Provident Fund. The system is quite unique in that it helps members set aside savings to meet their retirement, healthcare and home ownership needs (CPF 2020). Contributions are allocated across 3 accounts:

- **Ordinary Account** (OA): For housing, insurance, investment and education.

- **Special Account** (SA): For old age and investment in retirement-related financial products.

- **MediSave Account** (MA): For hospitalisation expenses and approved medical insurance (CPF 2020).

At 55, SA and OA savings are transferred to a **Retirement Account (RA)** to set aside savings for retirement payouts (CPF 2020). Individual retirement savings earn risk-free interest provided by the government (Oxera 2014; CPF 2020).

The CPF provides additional support to those with lower retirement savings balances by providing extra interest for certain balances. For example, those aged above 55 can earn 2% p.a. extra interest on the first $30,000 SGD [just over $30,000 AUD] and 1% p.a. extra interest on the next $30,000 SGD, with up to $20,000 SGD [just over $20,000 AUD] from the OA (CPF 2020). CPF savings hence earn interest rates of up to 4.5% p.a. in the OA, and up to 6% p.a. in the SA, MA and RA. There are also pension top-ups provided by government to support low-income members (Mercer 2019a);

"The Workfare Income Supplement (WIS) scheme provides cash and CPF payouts (up to $4,000 SGD/year) [just over $4,000 AUD] to help with expenditure needs and retirement savings of older lower-wage workers and persons with disabilities who work." (Interview, Central Provident Fund Board)

"The Government provides additional retirement support through the Silver Support Scheme (up to $900SGD /quarter [just over $900 AUD] from 2021) to elderly Singaporeans aged 65 and above, who had low incomes through life and now have little or no family support." (Interview, Central Provident Fund Board)

Members can voluntarily contribute more into their CPF accounts, and receive tax incentives. For example, members can obtain up to $14,000 [just over 14,000 AUD] of tax relief for top-ups made to their and their loved ones' RA annually (CPF 2020).

Occupational pensions offered by employers are possible, but they play quite a limited role (Oxera 2014).

The retirement age in Singapore is 62, however eligible employees are required through government regulation to be re-employed until age 67 (Mercer, 2019a). These ages are planned to increase to 63 and 68 respectively in 2022, and to 65 and 70 respectively by 2030 (Mercer, 2019b). The Singaporean government also provides incentives for employers to continue employment (or re-employ) older workers. The Special Employment Credit (SEC) provides employers up to 8% of the employee's monthly wage, for employees over 50. The Additional Special Employment Credit (ASEC) provides an additional wage offset of 3% to employers who re-employ workers above the re-employment age (Special Employment Credit 2020).

Singapore

Annuities: their role and demand

It is compulsory to convert the retirement savings accumulated through the CPF into an annuity at retirement, available from age 65. Prior to 2009 the only possible product was a fixed term annuity of around 20 years called the **Retirement Sum Scheme (RSS)** (Interview, Central Provident Fund Board). Singaporeans did have the option to use their retirement savings to purchase approved annuities, however this was not common, with only 4-5% of people purchasing annuities (Oxera 2014). This low demand was attributed to a low level of understanding of annuity products, as well as high associated costs and poor returns (Prime Minister's Office Singapore 2007).

In response to increasing concerns about outliving one's income in retirement (CPF 2020), in 2009 life annuities called **CPF LIFE** scheme were introduced (Oxera 2014). Life annuities are now compulsory in Singapore for anyone born from 1958 and who have accumulated at least $60,000 SGD [just over $60,000 AUD] in their retirement account (CPF 2020), with those outside of this qualification still able to opt in to the life annuity or remain with a fixed term annuity (RSS).

Singaporeans also have the option to withdraw part of their savings as a lump sum from the age of 55;

"Upon reaching age 55, members can withdraw at least $5,000 from their Special and Ordinary Accounts. Those who can set aside their Full Retirement Sum ($181,000 SGD [just over $182,000 AUD] for those turning age 55 in 2020) in their Retirement Account can also withdraw all their remaining Ordinary and Special Account savings. Members born from 1958 can also withdraw up to 20% of their Retirement Account savings upon reaching age 65." (Interview, Central Provident Fund Board)

A recent study found that 60% of CPF members reported making a cash withdrawal (median amount = $9,000SGD [just over $9,000 AUD]; average amount = $33,000 [just over $33,000 AUD]) (CPF 2018). Common reported uses of cash withdrawals include (1) having funds in a bank with no specific use (indicating a desire for liquid assets and flexibility, (2) to pay for an immediate expense (e.g. to pay a loan), and (3) to spend on a large purchase (e.g. a holiday, home renovations) (CPF 2018).

During accumulation, CPF members have the ability to select investment options to help maximise their retirement savings growth (Oxera 2014; Interview, Central Provident Fund Board). There are also a few options available for Singaporeans to tailor or modify their retirement income.

First, *"Members can be exempted from CPF LIFE if they are receiving equivalent lifelong monthly payouts from a pension or a private annuity purchased using cash. However, few have chosen to be exempted from CPF LIFE as it offers higher payout per premium dollar as compared to other private annuities."* (Interview, Central Provident Fund Board)

Singapore

Annuities: their role and demand *continued*

Second, individuals have the option to top-up their CPF retirement account or have funds transferred to them by a loved one via the **Retirement Sum Topping-Up Scheme**, or to defer the annuity (up to age 70) in order to increase their annuity income (CPF 2020; CPF 2018).

Third, within CPF LIFE there are three main plans; the default **'standard plan'** which offers a standard life annuity with higher monthly payouts; the **'escalating plan'** which starts with lower payouts and increases by 2% annually; the **'basic plan'** which provides a lower income payout (CPF 2020).

According to the Central Provident Fund Board (interview) "About 70% of the CPF LIFE members are on Standard Plan". Members choose their CPF LIFE plan when applying to start receiving their CPF LIFE monthly payouts, which can be anytime between age 65 to age 70. If they do not choose a plan before age 70, they will be automatically placed on the Standard Plan and start payouts at age 70 (CPF 2020). Individuals can also increase their level of lifetime income by making voluntary contributions to their retirement savings (up to a savings cap of $271,500 SGD [just over $273,000 AUD]), or by deferring their retirement payout up to age 70, with payouts increasing "*by up to 7% for each year of deferment as the CPF savings can accumulate more interest*" (Interview, Central Provident Fund Board)

Annuities landscape

Both accumulation and payout phases are managed by the Central Provident Fund Board (Oxera 2014). The Central Provident Fund Board administers and manages all retirement savings and retirement income products in the public system, and while there is technically the option for individuals to transfer their retirement savings to private pension providers, the market for this is limited (Oxera 2014). In 2020 there were 4 million CPF members, with $444.8 billion SGD (over $459 billion AUD) in CPF balances (CPF 2020).

Singapore

Strength of annuities

A key strength of the retirement system in Singapore is that **the government provides risk-free interest rates** that strengthens retirement incomes (PPI 2014; Oxera 2014). In their 2015-2016 review of the CPF system, the CPF Advisory Panel explained that while local private annuity providers are allowed to offer their products for purchase using CPF monies in lieu of CPF LIFE, none currently do so primarily because they are unable to offer products that can provide higher payouts than CPF LIFE for the same committed premium (Ministry of Manpower 2016).

"CPF LIFE is an attractive retirement scheme that offers higher payout per premium dollar as compared to other private annuities. As a national scheme administered by the Central Provident Fund Board, CPF LIFE has no distribution costs, and CPF LIFE monies are guaranteed by the Singapore Government. CPF LIFE is also inclusive as there is also no minimum premium required to join – all members can join CPF LIFE regardless of their RA balance." (Interview, Central Provident Fund Board)

In addition, the strategic transition to the mandatory system and **simplifying public communication** (World Economic Forum 2017) were key to its success. CPF LIFE was introduced in 2009 on an opt-in basis, before becoming mandatory for subsequent cohorts turning age 55 from 2013 onwards; the phasing in of CPF LIFE allowed the Government to address the public's concerns and to increase acceptance for the mandatory scheme (World Economic Forum 2017). The design and implementation of CPF LIFE also leverages behavioural concepts to increase acceptance and understanding (World Economic Forum 2017). For example;

"Information is made readily accessible on our website and through our outreach activities, with the use of infographics, videos and interactive tools to aid members' understanding." (Interview, Central Provident Fund Board)

Finally, in addressing loss aversion, **beneficiary payments** have been incorporated within all CPF LIFE annuity products;

"Upon member's demise, any CPF LIFE premium balance will be paid to the beneficiaries. The member and his loved ones will always get back the amount of CPF LIFE premium that was put into CPF LIFE." (Interview, Central Provident Fund Board)

Singapore

Present challenges

A key challenge is to ensure that Singaporeans have sufficiently prepared for their retirement (The Economist Intelligence Unit 2018). As **life expectancy** increases, this issue becomes more exacerbated; a recent survey found that many Singaporeans do not believe they are financially prepared to live to old age (100), and many 'plan on relying on a salary' to financially support themselves in their older years (The Economist Intelligence Unit 2018). While this can be a viable strategy (with some arguing that the retirement age should be raised; Mercer 2019a), there is also the chance that due to unforeseen circumstances (ill health, redundancy, inability to work etc) an individual's cannot simply work for longer, with their retirement savings goals becoming unattainable (The Economist Intelligence Unit 2018). Therefore, there is also an argument of starting retirement planning earlier;

"One challenge is to get Singaporeans to proactively start their retirement planning earlier. We have outreach initiatives to educate the public on the importance of saving for their retirement needs. We conduct the annual CPF Retirement Planning Campaign, which comprises an integrated marketing campaign and a series of roadshows to encourage CPF members to actively plan for their retirement. The 'Are You Ready?' website is another initiative that aims to help the public understand the different aspects of their CPF savings as they go through the key stages of their life – from starting work, buying a house, to planning for their golden years. CPF Board also provides personalised one-to-one sessions for members turning 55 and 65 ("CPF Retirement Planning Service"). This helps members to understand their various options and make informed decisions for their retirement." (Interview, Central Provident Fund Board)

Chile

Retirement System Overview

PILLAR 1: PUBLIC PENSION	
- Basic solidarity pension (PBS) for those with no pension, and additional supplements (Solidarity Pension Payments) for those with low pensions (OECD 2019h). - Means-tested and financed by general taxes (SGI 2019).	- PBS = CLP107,304 ($186.86 AUD) per month as of December 2018 (OECD 2019h). - Only the poorest 60% of the population are eligible (OECD 2019h).
PILLAR 2: MANDATORY CONTRIBUTION PILLAR	
- Contributions to individual pension accounts (SGI 2019) within a privately managed system of a small number of Administradoras de Fondos de Pensiones (AFPs)" (Mercer 2019a)	- 10% salary contribution paid by employees (Oxera 2014) - Ceiling on covered earnings per month (indexed to real earnings growth) – the equivalent of CLP 2,158,401 ($3,758.59 AUD) in December 2018 (OECD 2019h)
PILLAR 3: VOLUNTARY PILLAR	
- Supplementary defined contribution (DC) plans sponsored by employers (Mercer 2019a), or voluntary contributions to savings accounts managed by AFPs, mutual fund administrators, investment fund administrators, life insurance companies, and banks (Oxera 2014)	- *"Both [have] tax incentives to motivate retirement savings."* (Associate Professor Marco Morales, Department of Economics, Diego Portales University)

Chile

Retirement System Overview

Pillar 1 of the Chilean pension system is the basic solidarity pension (PBS) (OECD 2019h), a means-tested public pension funded by taxes (SGI 2019). This pension is only intended for those who do not have other pensions, and eligible only to the poorest 60% of the Chilean population from age 65 (OECD 2019h). Additional pension supplements (Solidarity Pension Payments) are also available to those with low pensions (OECD 2019h). Individuals must have been Chilean residents for at least 20 years to qualify for social assistance (OECD 2019h). Pension benefits are also provided to women based on how many children they have, redeemable at age 65 (SGI 2019).

The second pillar is the mandatory contribution pillar, managed by Pension Fund Administrators called Administradoras de Fondos de Pensiones (AFPs) (Mercer 2019a). The purpose of pillar 2 is for government to supervise that Chileans' adequately save for retirement, while also relieving government pension costs (Columbia Threadneedle 2016). Pillar 2 forms the main component of the Chilean pension system (Oxera 2014). Contributions are kept in an individual member account with funds being invested by the AFP to grow retirement savings (Columbia Threadneedle 2016). Five investment funds comprising of different risk profiles are available, with investment policies for each mandated by the Pension Fund Regulator (Columbia Threadneedle 2016). Individuals who do not select an investment fund are automatically assigned according to age, whereby younger people are placed in higher risk profile funds and transition to more conservative funds over time (Columbia Threadneedle 2016). Fund providers are required (and supported) by government to guarantee minimum rates of return (PPI 2014). There are additional provisions to help individuals maintain pension contributions during work disruptions; for example, pension contributions are covered for parental leave for 24 weeks, and eligible individuals who experience unemployment have their pension contributions made by the solidarity unemployment fund (OECD 2019h). Recent legislation in 2019 was introduced that mandate the self-employed to also make contributions (OECD 2019e).

The third pillar includes tax incentivised voluntary savings that aim to supplement mandatory pensions and provide greater financial comfort in retirement (Columbia Threadneedle 2016).

The retirement age is 65 years for men and 60 years for women (OECD 2019h).

Chile

Annuities: their role and demand

Annuities play an important role in the Chilean retirement system, with the key decision at retirement being whether (and how much) to allocate to an annuity versus phased withdrawals (Columbia Threadneedle 2016);

"For the decumulation phase, the savings in mandatory plus voluntary accounts could be either left invested with the AFP and make phased withdrawals (until no money left in the account) or used to buy an annuity from an Insurance Company." (Associate Professor Marco Morales, Department of Economics, Diego Portales University)

More specifically, retirees decide among four main options; (1) planned withdrawal; (2) lifetime annuity; (3) deferred annuity with a temporary income drawdown; (4) combination of lifetime annuity and planned withdrawal (Oxera 2014). There are financial thresholds in place for an individual to be able to purchase an annuity, whereby the calculated income from the annuity must be higher than the PBS (basic solidarity pension) (OECD 2019h).

Planned withdrawals are managed and paid directly by the AFP, whereas when an individual decides to purchase an annuity, the AFP transfers the individual's savings to a nominated life insurance company (Oxera 2014). There is considerable government regulation across the Chilean retirement system, including the provision of financial information and public comparisons of AFPs during accumulation, and an electronic quotation system called SCOMP to assist individuals in comparing retirement options and annuity products (Oxera 2014).

Earlier estimates indicated 57% of retirees were covered by an annuity (Oxera 2014). PPI (2014) reported just under 70% took an annuity, however this was based on "savers for whom annuities were an option" (implying that those below the balance threshold were excluded from this calculation, which may explain this discrepancy). Current estimates shared by Associate Professor Morales are also quite different, indicating that the annuitisation level may have dropped in recent years;

"In terms of the share of annuities as pension alternative, they correspond to 1/3 of the people receiving pensions, but 1/2 of the amount paid as pensions. The most important annuity type is the immediate annuity, followed by a deferred annuity ("renta temporal" which is a combination of a phased withdrawal and a deferred annuity)." (Associate Professor Marco Morales, Department of Economics, Diego Portales University)

It is argued that Chileans on either end of the retirement saving spectrum may be less inclined to take an annuity. Those with low pension balances may not reach the threshold required to purchase an annuity (OECD 2019h), while those with high balances may not be concerned with longevity risk (i.e. they are not worried of running out of money) (Oxera 2014). In addition, the popularity of the 'renta temporal' phased withdrawal and deferred annuity combination indicates a strong preference for short term consumption of their retirement savings, which may indicate that individuals still have significant expenses as they reach retirement (for example mortgage payments) (Oxera 2014).

Chile

Annuities: their role and demand *continued*

Lump sums are also permitted at retirement for those who have considerable pension balances (and are subject to caps); the remaining pension funds must be sufficient to finance the equivalent of the maximum welfare pension, and must also provide a 70% replacement rate for the individual based on their income for the 10 years prior to retirement (OECD 2019h). Similarly, early retirement is possible if the individual's pension payments meet the 70% replacement rate criteria (Oxera 2014). Pension deferrals and pension benefits received while working are also possibilities (OECD 2019h).

Competitive landscape

The Chilean annuity market is very competitive and highly regulated by government (Oxera 2014);

"The annuity market is a competitive market, with 13 Life Insurance Companies in the market. The competition is ensured by the existence of the SCOMP an electronic quotation system where all the companies have to offer annuities at the same time for the retiring workers (auction system)." (Associate Professor Marco Morales, Department of Economics, Diego Portales University)

The SCOMP system requires all life insurance companies to be registered with the government regulator, with regulations also around minimum capital requirements, prohibition of foreign insurance companies, and also caps on administration costs (Oxera 2014). In addition, all annuities offered in Chile must be inflation-linked (Oxera 2014).

Chile

Strength of annuities

The popularity of annuities in the Chilean market can be attributed to the perceived importance of assuring **longevity protection** (as the state pension is not universal) (PPI 2014).

"I think the reasons why the annuity market is strong in Chile have to do with the unattractiveness of Phased Withdrawal profile (annually decreasing payments) making difficult to smooth consumption during the retirement period, as well as with risk aversion of retirees about outliving their savings (longevity risk). On the other hand, given that the first pillar is just for 60% poorest people in the country, the longevity insurance offered by the state pension (solidarity pillar) is not available for middle and high income retirees." (Associate Professor Marco Morales, Department of Economics, Diego Portales University)

In addition, various restrictions on accessing savings and charges associated with phased withdrawals may make annuity products seem more appealing (PPI 2014). **Government regulations** seek to make the entire retirement system (including annuities) more competitive and yield greater returns for retirees; this includes fee caps (Oxera 2014), guaranteed (and government backed) minimum rates of return from AFPs (PPI 2014), as well as the transparency and competitiveness elicited by the electronic quotation system SCOMP (Oxera 2014). In fact, a recent study found that "after controlling for other regulatory changes and the main determinants of annuity rates, the new quotation system raised annuity payments by 15%" (Morales and Larraín 2017, page 389).

Present challenges

Challenges still remain in the Chilean system regarding the prevention of **poverty in retirement**, particularly for those who have had low-paying, unstable or informal employment (SGI 2019). Following considerable political and public debate from 2014-2016, including peaceful public demonstrations in over 50 cities, in late 2018 pension proposed system reforms were announced. These reforms included significantly increasing the solidarity pillar to help the most vulnerable, and heightening incentives to encourage people to postpone their retirement (SGI 2019). Mercer's (2019a) evaluation of the Chilean system also advocated for increasing social assistance for those in most financial distress, and to increase the retirement age.

Implications

These country overviews are intended to provide reference and inspiration for those in countries like Australia where annuities currently play a smaller role, and where recent debate has posited a 'refocus' from accumulation activities towards *how money is spent and managed throughout retirement.* We recommend taking into account the following considerations;

1. The role of government regulation. The selected countries demonstrate a broad spectrum of approaches in this regard. At the extreme end there is compulsory annuitisation (in the cases of the Netherlands, Sweden, and Singapore), while softer 'nudges' are demonstrated in the case of Denmark where tax treatments and regulation point in favour of annuitisation. Switzerland takes a more subtle approach again (from a compulsion perspective), where annuities are backed by a fixed nationwide conversion rate, and are the default product offered by pension funds.

2. Broad communication efforts. In speaking with experts about the strength of annuities in their respective systems, a common attribute was the significant role of communication in attaining public buy-in of annuities. Particularly interesting is the case of Singapore, who have experienced a relatively recent transition to compulsory annuitisation. Taking a multi-phase approach where annuities were introduced and then made compulsory for certain cohorts first gave the government opportunity to address concerns and increase acceptance of annuities. Communication was also raised as a strength in Denmark where considerable effort has been taken *between government and pension funds* to communicate the benefits of annuitisation to Danish consumers. Chile enhances industry transparency and competitiveness through management of the electronic quotation system SCOMP. Key to this strategy is a government (or at least industry-wide) approach which may be seen more as a public-interest strategy rather than a marketing strategy.

3. Understanding people, culture and context

The strength of annuities across each of the countries under review included some reference to underlying attributes of the people, the culture, or the broader retirement context. For example;

In Denmark and Sweden a strong history of defined benefits provided a sense of familiarity and comfort in the annuity concept.

Denmark and the Netherlands also share cultural characteristics that place importance on the collective, with perceived social responsibility in saving and being conservative with money.

In Singapore, by acknowledging the strong loss aversion of the Singaporean culture, the CPF provide security in lifetime annuities that also incorporate bequests.

In Chile, a strong motivation for lifetime annuities comes from the fact that public pensions can be quite difficult to obtain; putting savings into a lifetime income is seen as necessary because there is little support to fall back on if money runs out.

It is not suggested that one should seek to emulate another country's culture or context; the point is to highlight the pivotal role that these elements play in framing a population's sentiments towards annuities. Ample consideration should be given to people, culture and context to understand what country attributes will work in favour (or form a barrier) for annuities.

Conclusion

In conclusion, this report has collated the findings from desk research and expert consultation across 6 high-performing retirement systems; Denmark, the Netherlands, Switzerland, Sweden, Singapore and Chile.

Those seeking to emulate the advances that have been made abroad with regards to the integration of annuities are encouraged to consider;

- How government regulation can provide a positive framework for annuities
- How broad communication efforts from industry and government can enhance public buy-in, and
- How the people, culture and broader retirement context within a country will serve to favour or hinder the integration of annuities.

Further information about the Orford Initiative

To find out more about our previous research, please visit the Orford Initiative webpage:

https://go.mbs.edu/orford/

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