INTER-AMERICAN
DEVELOPMENT BANK

Best practices for the Payout Phase – Introduction to the PLAC Project

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Webinar

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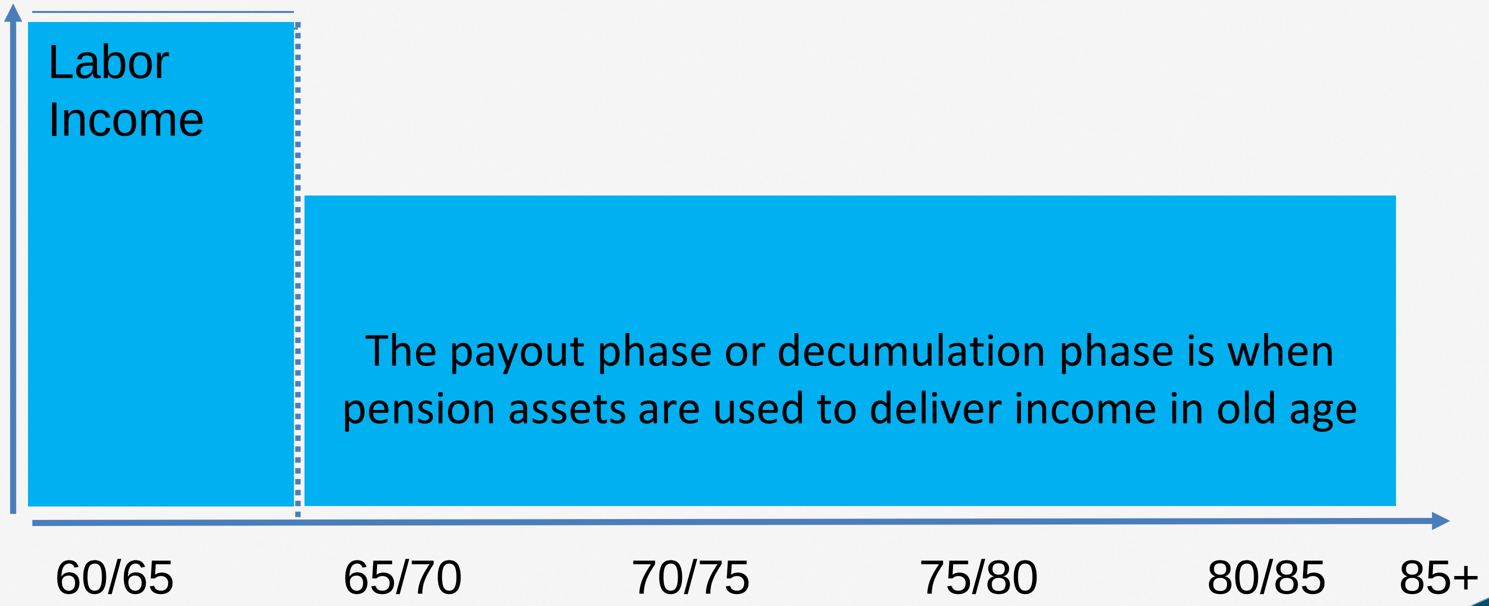
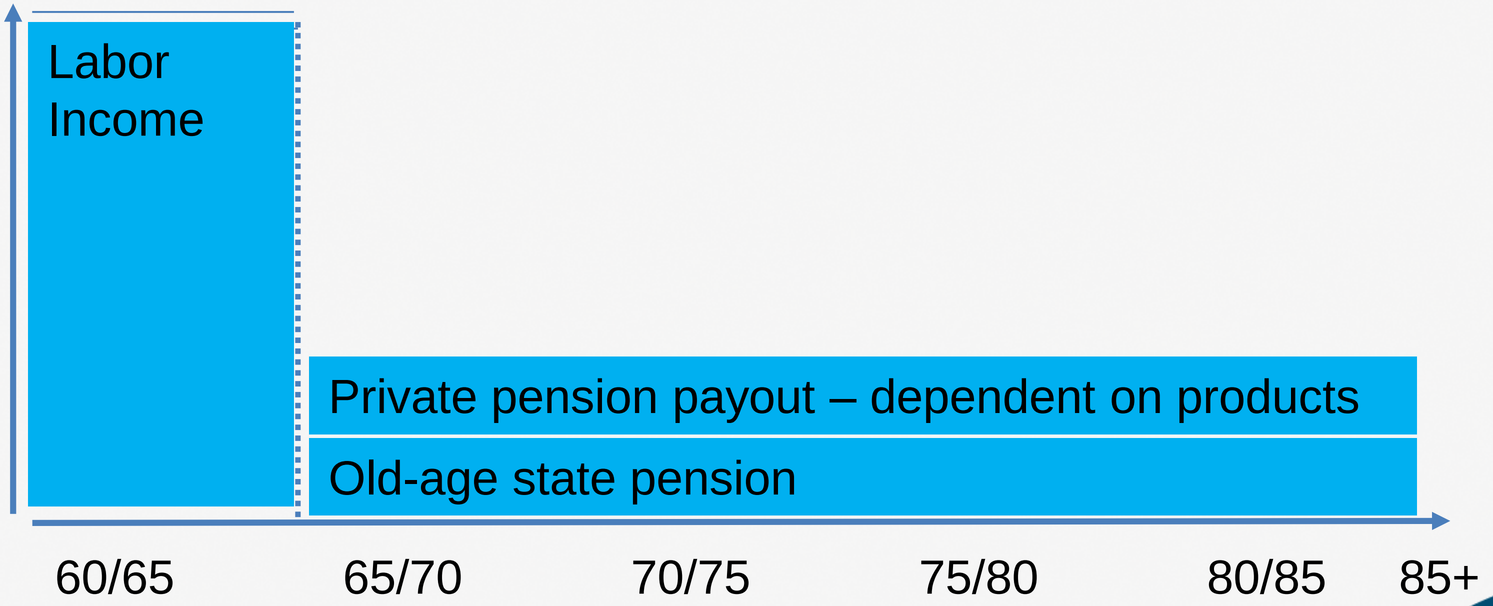
AGENDA

1. Introduction to the Project
2. Introduction to the Payout Phase and the Problem
3. Explanation of different Products
4. Considering different Providers
5. International experience and trends
6. Regulation and supervision
7. Questionnaire
8. Questions and Next Steps

The central problem for the payout phase is how to create a stream of retirement income from pension assets rather than have all the money spent rapidly and have fall back into poverty in old age.



Income from private pensions is typically added to some type of public pensions – although there can be complex rules on eligibility depending no relative income and years of contribution



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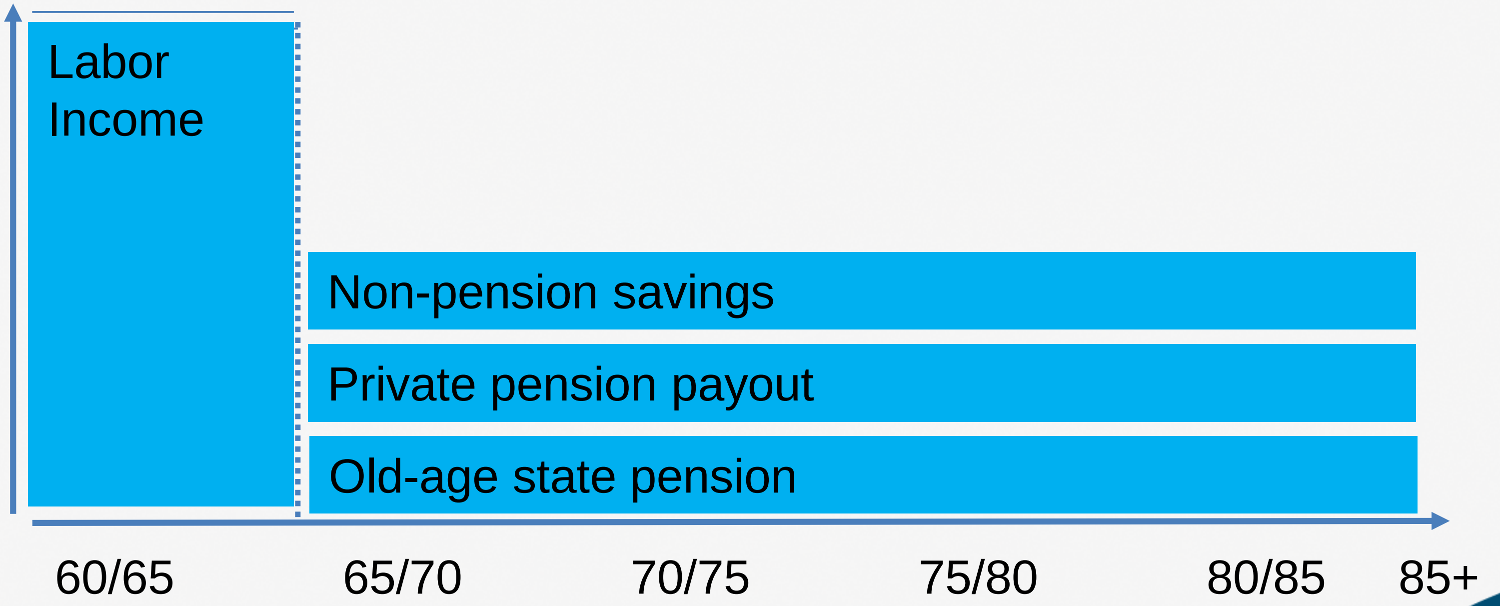
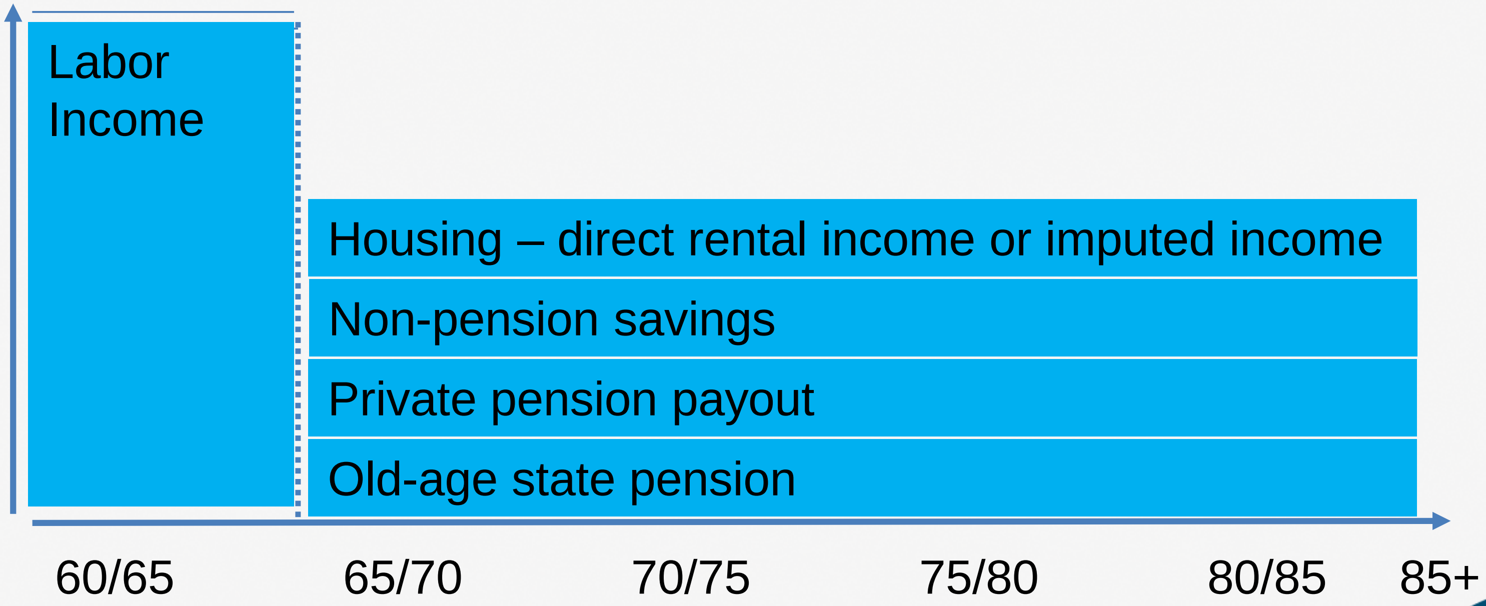
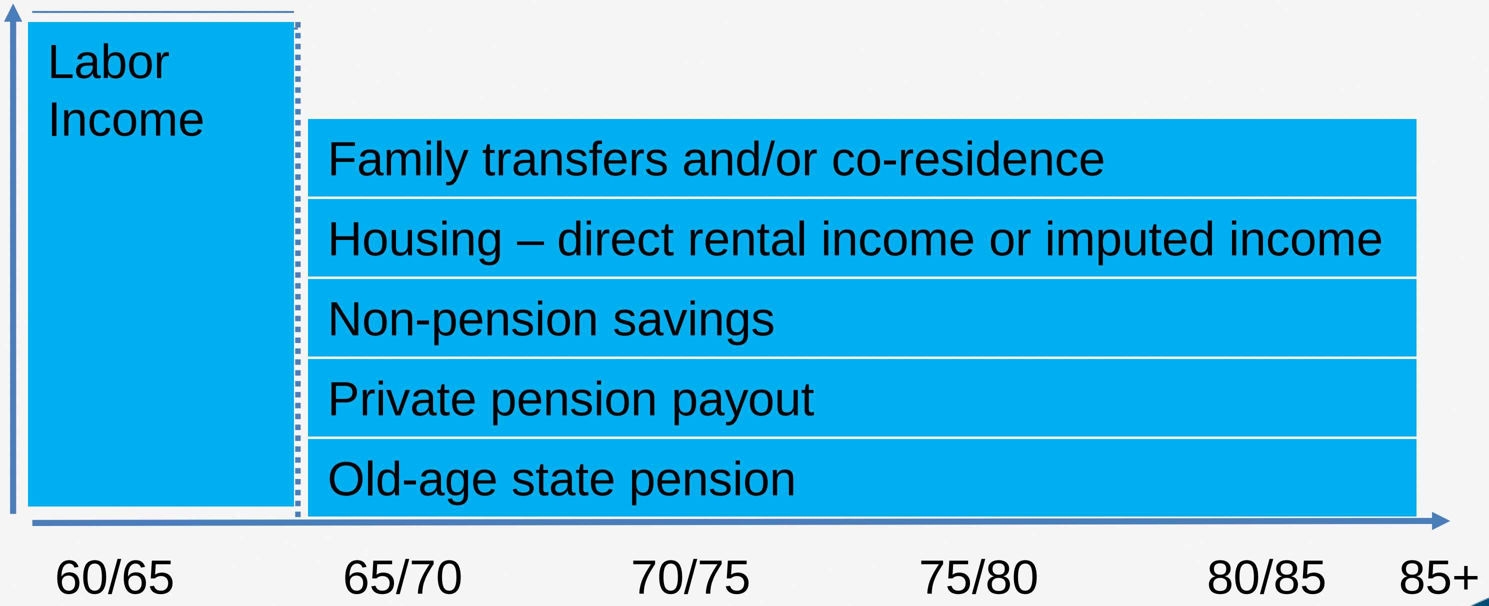
Some people may also have non-pension sources of savings



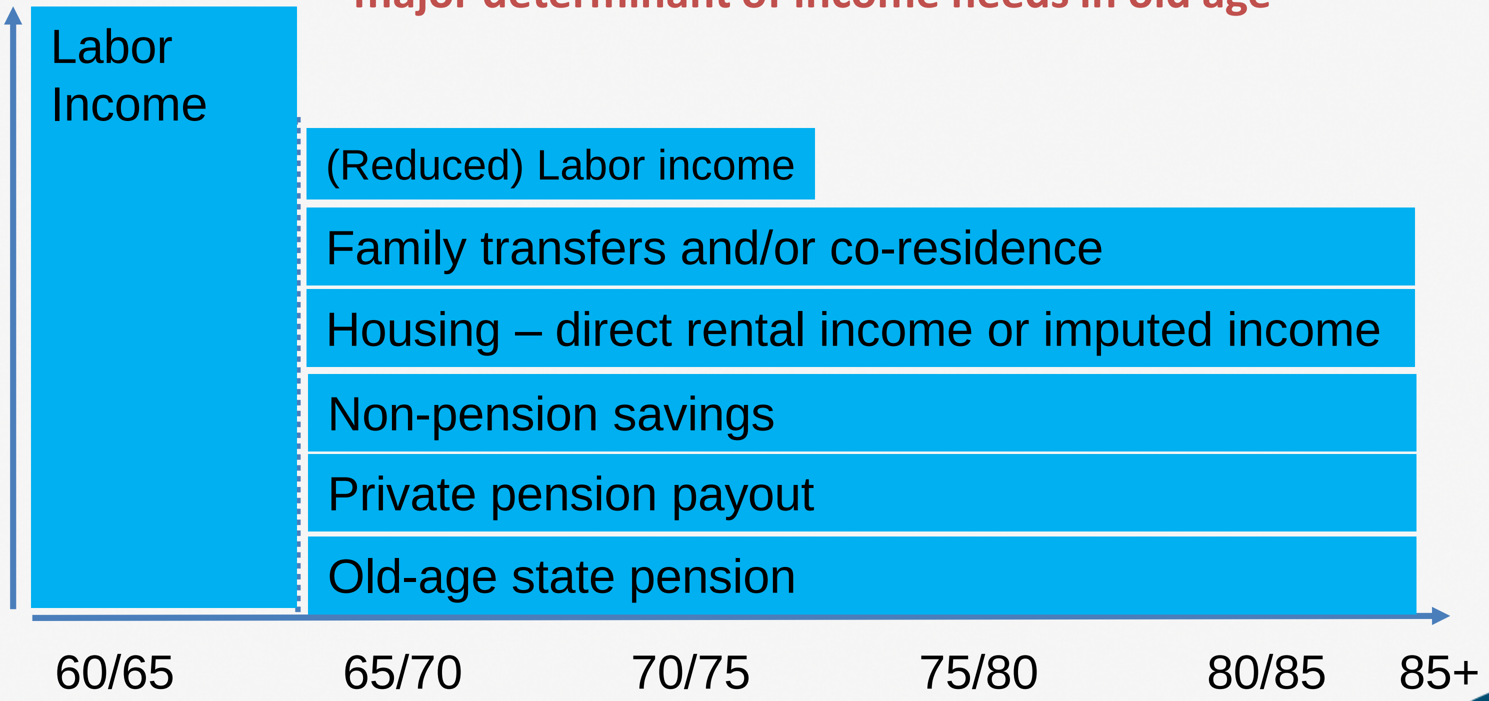
Housing can play a key role – either providing a source of income or protecting homeowners from the costs of renting – but for most people they cannot easily get an income from their housing



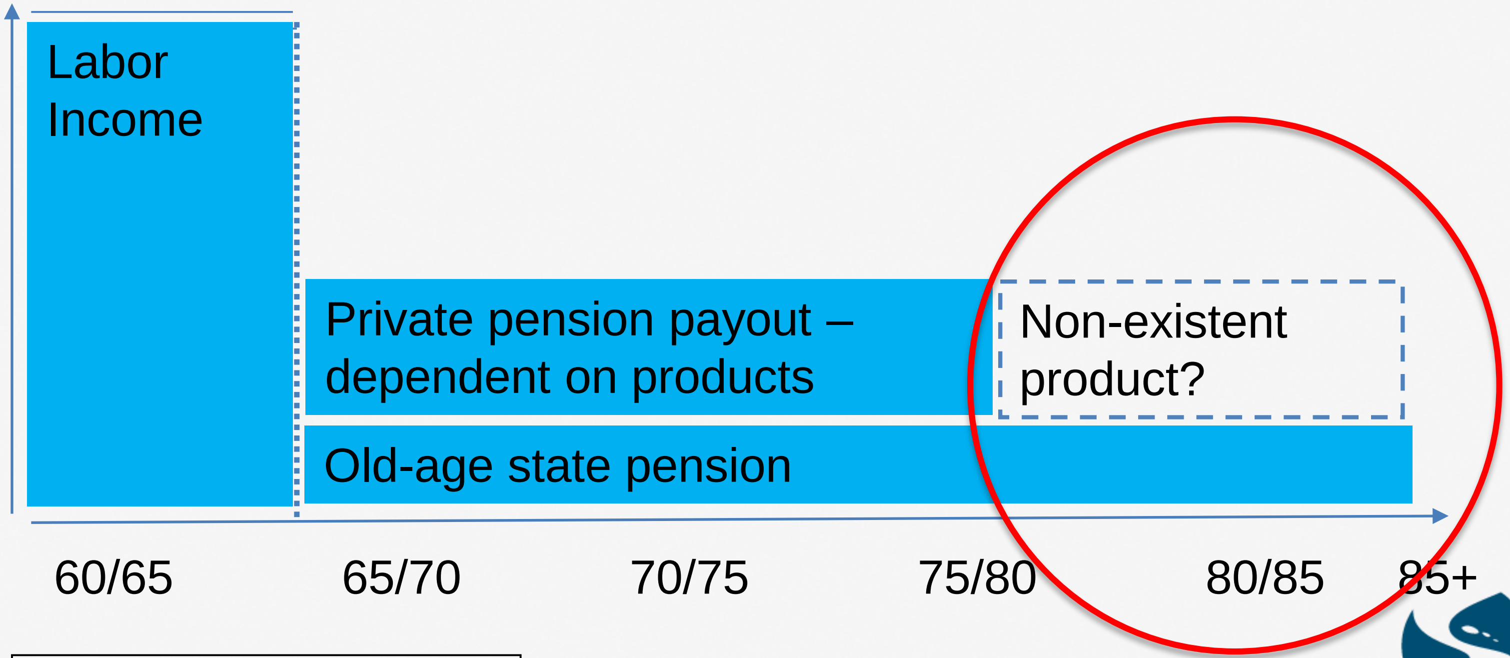
Family transfers are important in many countries as a retirement income strategy – including co-residence – and should not be forgotten even if they are typically becoming less reliable



Finally, some people may continue working for money – through choice or necessity. Some may have all sources of income – others very few. Health care access is also major determinant of income needs in old age

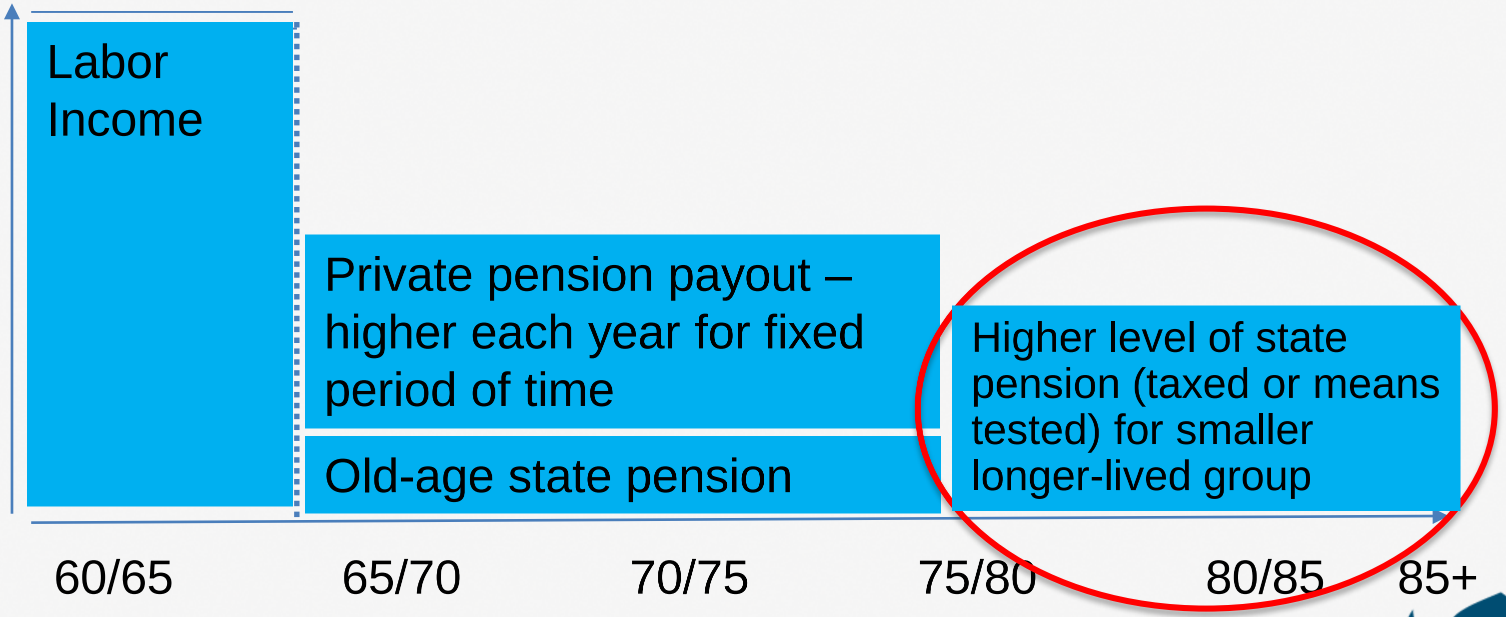


The ‘simple’ payout issue of providing an income in old age is in practice complex as many financial markets find it difficult to deliver a promise of income until death



Source: Price (2017)

One solution is for public pensions to pay less at 'young' old age and more to the smaller group who reach very old ages so private pensions tackle the simpler task of covering a fixed period – not income till death



Source: Price (2017)

Most 'solutions' for the payout phase involve one or more of the approaches outlined in the table below – which have different benefits in protecting against the risks faced in old age

	Protection offered			*Benefits provided*	
Retirement product	***Longevity risk***	***Investment risk***	***Inflation risk***	***Bequest***	***Liquidity***
Fixed real life annuities	Yes	Yes	Yes	Limited	No
Fixed nominal life annuities	Yes	Yes	No	Limited	No
Escalating real life annuities	Yes	Yes	Yes Plus	Limited	No
Escalating nominal life annuities	Yes	Yes	Partial	Limited	No
Variable life annuities, guaranteed benefits	Yes	Yes	Possible	Limited	No
Variable life annuities, bonus payments	Shared	Shared	Shared	Limited	No
Variable life annuities, unit linked	Shared	No	No	Limited	No
Phased withdrawals	No	No	Possible	Yes	Possible
Lump sum	No	Possible	Possible	Yes	Yes
Self-annuitization	No	Possible	Possible	Yes	Yes

Source: Based on Rocha and others 2011

The simplest solution is to pay people a lump-sum – so all the money is withdrawn at one time from the pension fund. This is not a great idea.

- Paying a lump-sum will often be popular – people are very attracted to access to all of their money – but that is why the accumulation phase needs mandatory or autoenrollment features to ensure saving in the first place
- There can be good reasons why some people may need the money – and access to 25% of the money is a popular compromise
- But if the aim is to deliver retirement income then a lump-sum is a bad idea
- Malaysia has a fantastic accumulation phase – with employers and employees contributing around 23% of salary BUT 100% lump sum access is possible – and survey evidence suggests 70% of people use all their savings within 10 years
- Even the most basic financial system can do better – paying phased withdrawals only needs the same infrastructure as paying a lump-sum

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Phased or systematic withdrawals are popular in many countries

- Phased withdrawals are simpler to implement than annuities
- If the status quo was lump sum then phased withdrawals are better
- They can be cheaper to provide than annuities (though see later discussion on market structure)
- Phased withdrawals can be very simple e.g. paid out in full over 10 years or use a 'rule of thumb' such as paying 4% or 5% of the balance each year
- Or they can be more intelligent – using an annuity formula (see below) linking payments to interest rates and life expectancy
- However, **phased withdrawals do not give a guarantee of income until death** – annuities are 'expensive' partly because they provide a valuable guarantee
- The right payout may differ if public pensions are generous - one reason why Australia allowed 100% lump sums but even here there is dissatisfaction with the payout phase (see below)
- If phased withdrawals are used without any default rules then members will need to take decisions are each year on the amount to withdraw and investment strategy. Even at 60/65 these may be tough to understand – increasingly so as they get older

Annuities are often recommended as the ‘best’ solution - and they have major advantages. But markets are only large where annuities are mandated. But the financial market requirements are demanding

1. Quality of the mortality and other data and ability to predict liabilities more accurately;
2. Ability to hedge mortality risk through offsetting it against life assurance and other business;
3. Asset allocation, sources of yield above government bonds and the ‘illiquidity’ premium;
4. (Volatility in) market price of assets used by insurance companies to match their liabilities;
5. Use of financial market instruments to improve asset liability matching for lower cost;
6. Regulatory restrictions preventing ‘optimal’ asset allocation strategies;
7. Strength of competition reducing margins to profit maximizing level;
8. Scale of the market – ability to offset fixed costs in quotation process against volume;
9. Cross-selling – selling on other parts of a group’s products – e.g. loans and credit cards;
10. The sophistication of the customer base and the cost and transparency of the distribution;
11. Their ‘popularity’ will depend on legal requirement on annuitization v other options

Annuity payments are calculated using an annuity formula that can be quite complex! But its essential features are quite simple – and driven by life expectancy, interest rates and costs.

The formula essentially says that a given stock of assets will provide more income each year if interest rates are mortality rates are higher (and costs are lower).

$$D(x) = \int_0^\infty e^{-\delta t} \frac{l(x+t)}{l(x)} dt$$

$$\delta = \ln(1+r) - \epsilon$$

$$l(x) = \int_0^\infty e^{-\int_0^x \mu(t)dt}$$

$$\mu(x) = \begin{cases} a + be^{cx} & for\ x \le 97 \\ \mu(97) + (x - 97) \cdot 0.001 & for\ x > 97 \end{cases}$$

Source: Swedish Premium Pension Agency Orange Report 2016

Providing and regulating annuities needs clarity on the use of mortality tables and their features. This may be natural for an insurance supervisor, but pension supervisors may need to learn about them.

Table 1.1. **Mortality tables and improvements required by regulation and used in practice**

	Minimum table required by regulation		Mortality improvements required by regulation		Mortality improvements used in practice	
Country	Annuity providers	Pension plans	Annuity providers	Pension plans	Annuity providers	Pension plans
Brazil	No	Yes	No	No	No	No
Canada	No	Yes	Yes	Yes	Yes	Yes
Chile	Yes	Yes	Yes	Yes	Yes	Yes
China	Yes	Yes	No	No	No	No
France	Yes	Yes	Yes	Yes	Yes	Yes
Germany	Yes	Yes[1]/No[2]	Yes	Yes	Yes	Yes
Israel*	Yes	Yes	Yes	Yes	Yes	Yes
Japan	No	Yes	No	No	Yes	No
Korea	No	No	No	No	No	No
Mexico	Yes	No	Yes	No	Yes	No
Netherlands	No	No	Yes	Yes	Yes	Yes
Peru	Yes	Yes	No	No	Some	Some
Spain	No	No	Yes	Yes	Yes	Yes
Switzerland	No	No	No	No	Yes	Some
United Kingdom	No	No	Yes	Yes	Yes	Yes
United States	Yes	Yes	No	Yes	Yes	Yes

Source: OECD

Notes: * The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

1. For non-regulated Pensionskassen and insurance oriented Pensionsfonds.

2. For regulated Pensionskassen and non-insurance oriented Pensionsfonds

As with many issues in pensions, understanding differences between men and women is important to understand risks and outcomes

Table 3.1. **Evolution of the gender gap in life expectancy at age 65**

Country	Gender Gap 2010	Change from 2000
Mexico	1.9	(0.0)
China	1.9	1.7
Israel*	2.2	(0.0)
United States	2.6	(0.4)
United Kingdom	2.6	(0.6)
Brazil	2.8	0.4
Chile	2.9	(0.4)
Canada	3.0	(0.5)
Germany	3.2	(0.6)
Switzerland	3.2	(0.5)
Netherlands	3.3	(0.6)
Spain	3.9	(0.1)
France	4.2	(0.4)
Korea	4.5	0.6
Japan	5.0	0.2

Source: Human Mortality Database (HMD) where available

* The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

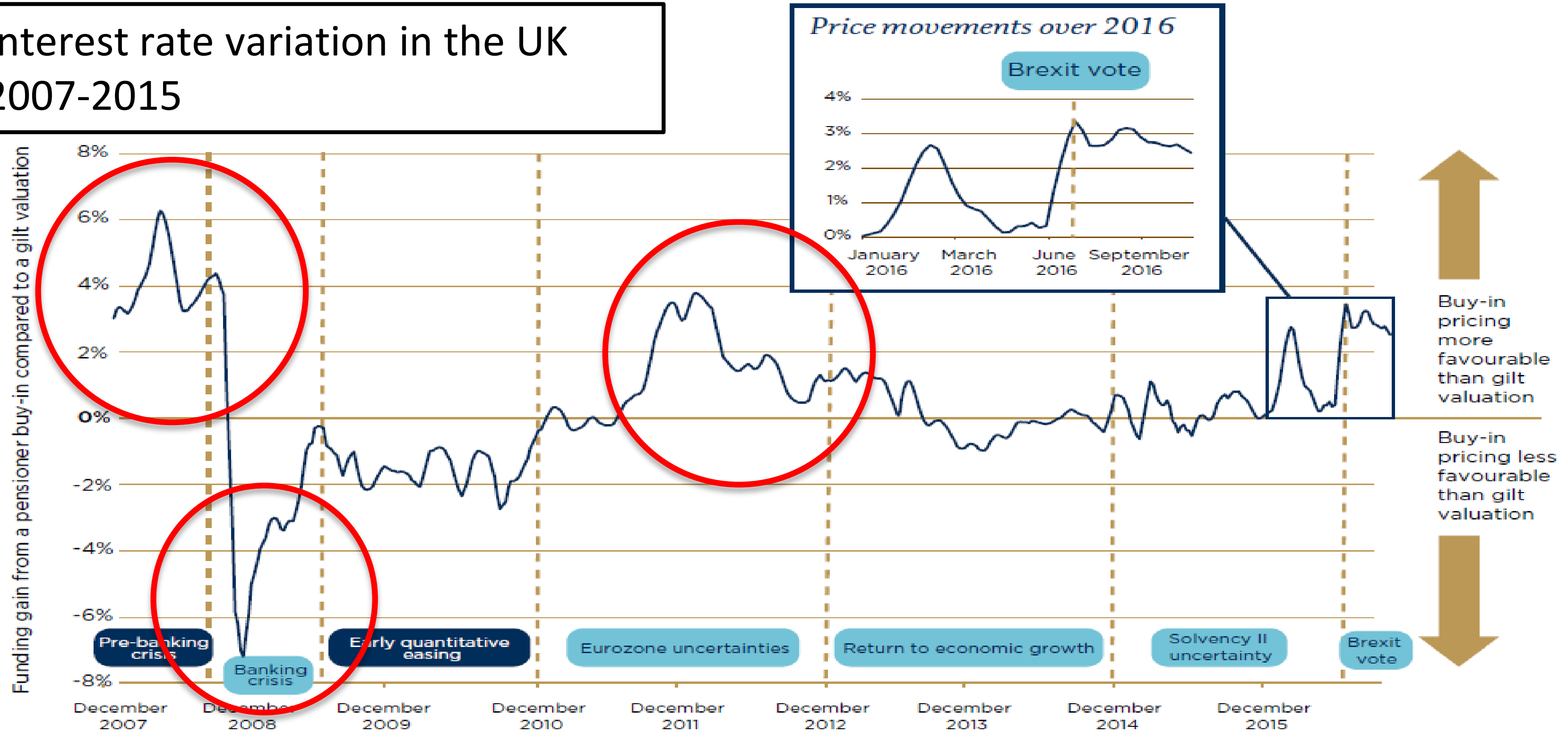
Source: OECD (2014)

Since women tend to live longer than men a given stock of assets will buy a lower annual annuity – but will payout for more years. If women also have earlier retirement ages this dramatically impacts the ratio of working years to retirement years.

Some countries require insurers to use a 'unisex' mortality table so men and women get the same annual payment – but women will receive the payout for more years

Annuity pricing varies with interest rates – so it is useful to explore variable annuity options (as in Sweden) or bulk auctions so members can benefit from the best pricing as variations can be large even in developed markets

Interest rate variation in the UK 2007-2015



Source: LCP analysis

Pay-out phase providers can be the same as for the accumulation phase, or new depending on regulations

- Lump-sum payouts obviously do not require a specialist provider – only a bank account
- Phased withdrawals can easily be provided by the pension funds or management companies that run the accumulation phase – but questions need to be asked about the quality of administration and charges
- Regardless of who delivers a phased withdrawal it is important to consider how they should be calculated – particularly if there is a choice between phased withdrawals and annuities
- Insurance companies typically provide annuities – and often also provide saving and payout products that are similar to pensions but may operate under different regulation and supervision
- But annuities do not have to be delivered by insurance companies – many countries effectively have pensions paid to death by the accumulation vehicle (with safeguards on funding) in employer sponsored DB funds
- Many countries with Defined Benefit public sector pillars struggle to deal with rising costs from growing life expectancy but the variable annuity model in Sweden (and Singapore) can build in automatic adjustment

International practice is very variable – with large annuity markets only in countries that mandate annuitisation

- All countries face the same issue of turning accumulated assets into old age income.
- Great deal of diversity internationally and regionally so better to look at successful examples
- Most countries allow some form of lump-sum access, some type of phased withdrawal and often legislate to allow annuities
- But most countries struggle to develop annuity markets – and they are only large in countries that mandate annuitization for the main private pension pillar in their country
- So in practice most countries effectively allow lump-sums and phased withdrawals – even though neither protects income until death
- One emerging trend is to focus as much on the market structure and way in which people choose the pay out – matching a trend in accumulation phase
- A second trend is finding a mix of phased withdrawal and deferred annuity
- Many countries struggle to deliver a traditional annuity (even if deferred) so variable annuities that can update as mortality updates are attractive

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Some high level examples from around the world can help to illustrate attempts to tackle key issues of retirement income

1. Malaysia – example of how undeveloped pay-out phase leads to rapid use of assets
2. UK – a ‘natural experiment’ to show how rapidly annuitization will fall and lump-sums will rise if compulsory requirements rise
3. Australia – ‘Comprehensive Income Product for Retirement’ recommendations due to dissatisfaction with 100% lump sums
4. UK – search for mix of phased withdrawal and deferred annuities as new way ahead
5. India – allowing mix of lump-sum and annuities but with a limited mix of available products and providers to enhance member protection
6. Sweden (and Singapore) – using successful institutions with scale, expertise and governance in the accumulation phase to deliver variable annuities to participating workers
7. Chile (and Mexico) – use of auctions with a limited range of annuity options so that members have a simple ‘default’ and a simple way to access them

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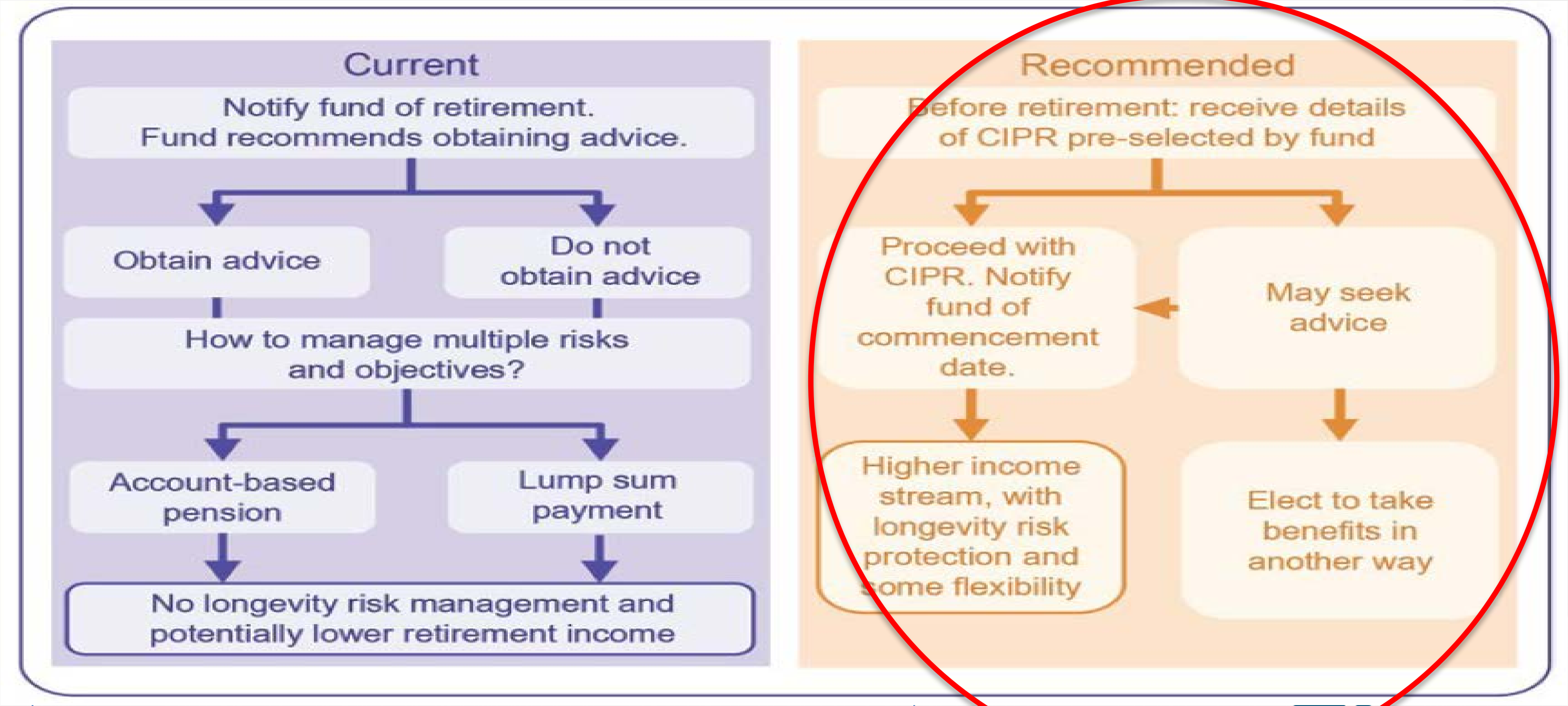
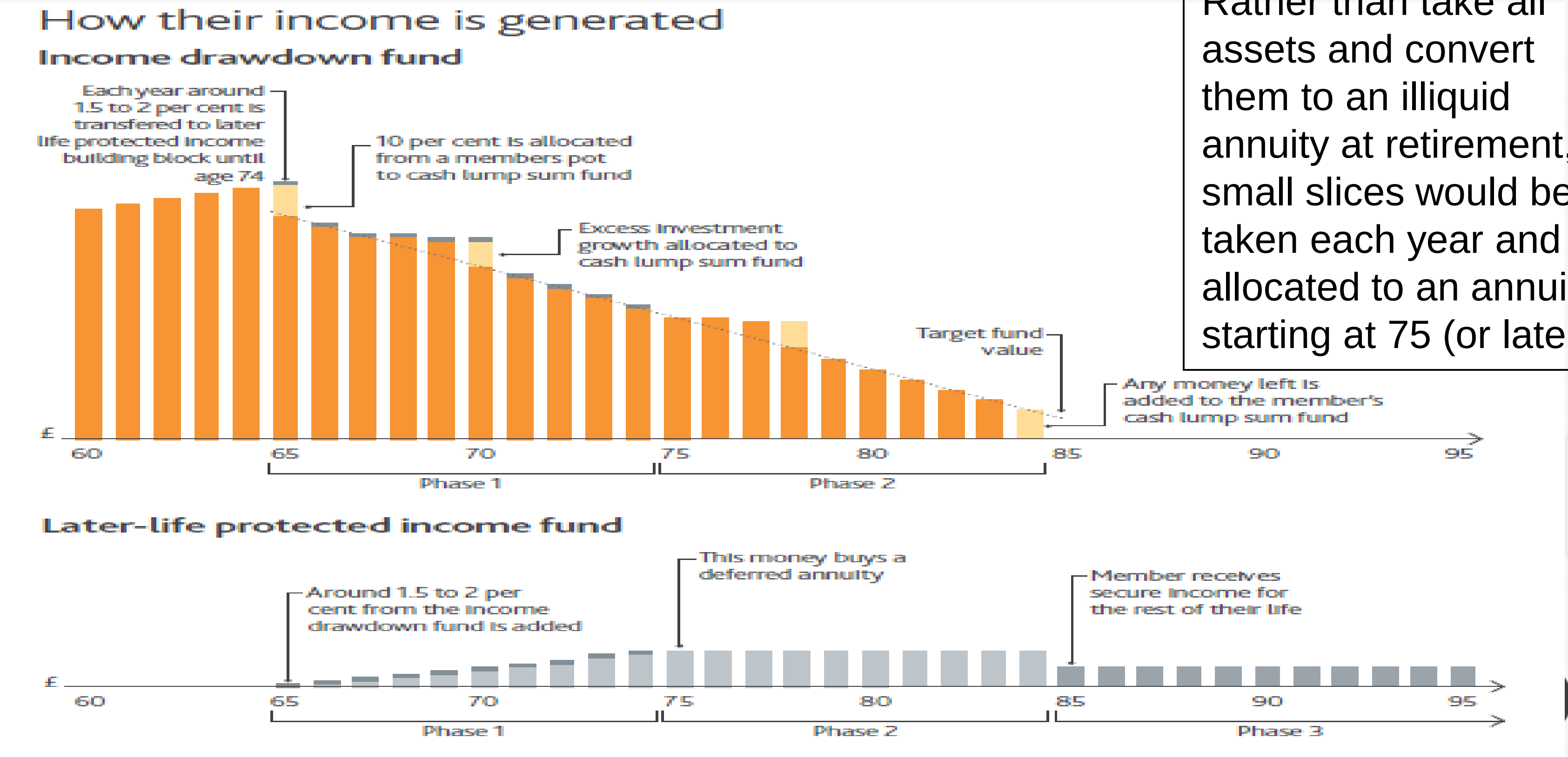
In Australia reforms are exploring how to use the good governance in the accumulation phase to help members by designing a good quality default income product – just as they are helped with default investment funds



Source: Financial System Inquiry: Final Report November 2014, Commonwealth of Australia

A number of countries are exploring how to mixed phased withdrawals with deferred annuities – giving people access to some of their money but protecting them in very old age



Rather than take all assets and convert them to an illiquid annuity at retirement, small slices would be taken each year and allocated to an annuity starting at 75 (or later)

Source: NEST Pensions UK 'A Blueprint for Retirement Income'

Regulation and Supervision

The approach to pay outs should use the 6 drivers of good supervision highlighted in the first PLAC best practice paper

1. Start with the **long-run outcome focused objectives** for the supervisor;
2. Focus on key **system-wide and specific pension fund risks** – which requires obtaining and using the right data;
3. Use a **range of tools to assess and understand risk** – including quantitative tools – and have a range of tools to deliver solutions;
4. **Enhance pension fund governance and risk management** as a central way to reduce risks – and shift first line of defense to (well-run) funds;
5. Ensure **risk-based selection of pension funds and subjects for supervisory focus**; and
6. **Prevention and remediation first with sanctions and enforcement for persistent or critical issues** – making sure enforcement not forgotten.

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Without specifying the payout phase you cannot know how well a system delivers retirement income – measured using five key outcomes

Outcome	Potential impact of the Payout Phase
Efficiency	• Costs of choice of payout product e.g. sales agents • Investment strategy during payout phase • Employment rates – rules on collecting a pension and continuing to work
Coverage	• Coverage of people receiving a pension can be much lower than people contributing due to: vesting rules, (early) withdrawal, use of lump sums • Gender gap in coverage if employment rate for men higher than women and no provision for survivor pensions
Adequacy	• Initial income at (early) retirement versus income when 80 or 85 • Gender differences in income level • Impact of inflation during the payout phase on pension income • Link between payout phase from private pensions and public pensions
Sustainability	• Viability of insurance providers • Funding levels for Defined Benefit Pensions • Impact of rising longevity (falling mortality) and whether retirement age adjusts
Security	• Rules to protect security of assets in providers and protect workers against fraud • Challenges for individuals to understand issues and make good choices • Priority rules between pensioners and workers still contributing • Integrating payout phase risks into Risk Based Supervision model • Role of pension supervisor v insurance supervisor and collaboration

Solutions to tackle risks in the payout phase should potentially use all the tools available to the supervisor – emphasizing a message from the first good practice paper on pension supervision

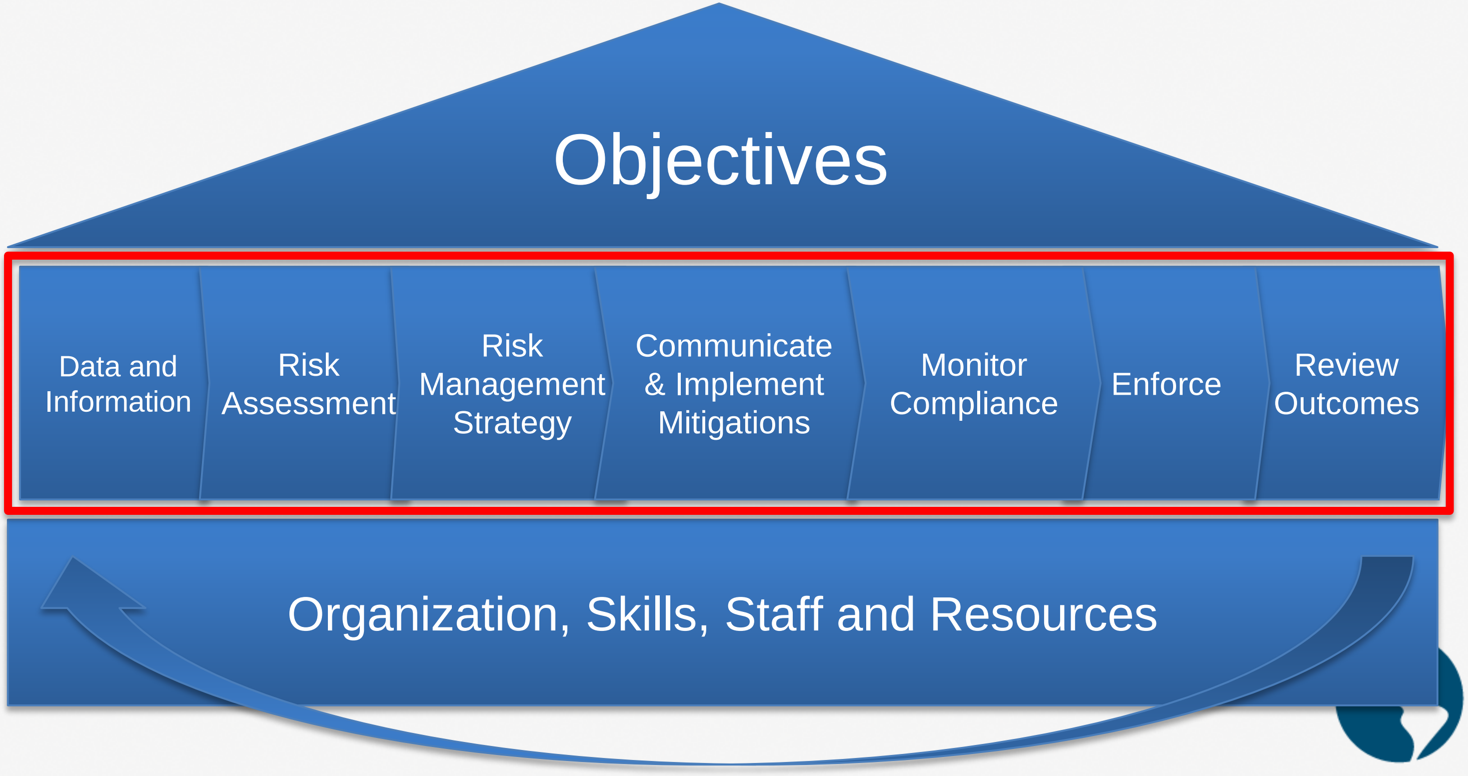
Potential Risk Mitigation Strategies

- Changes to regulation
- On-site inspection
- Off-site analysis
- Communications
- Supervisory interventions and enforcement
- Staff training
- Data collection and IT

The questionnaire highlights that some responsibilities may be split with the insurance supervisor – but aims to collect a coherent picture of the pay out phase in each country to aid the development of best practices

- The questionnaire is structured to collect information on:
  - All the regulators involved and current collaboration efforts
  - Current rules on access and product choice in the pay out phase
  - <u>How</u> members are allocated to products – a process that can be as important as the products they finally receive
  - Who delivers the different products and information on the use of mortality tables, discount rates, investment strategies and costs (may need to speak to providers/actuaries)
  - Background data on the mix between lump-sums, phased withdrawals and annuities
  - Data on current outcomes for the pay-out phase – who is receiving a pension, how much, any split between gender for current (and future) outcomes
- Collecting better data useful for regulation and international comparisons

All of the good practices required for other parts of pension supervision should be used to focus on the pay out phase – with a clearly structured approach to data collection, risk assessment, development of solutions, implementation and monitoring and enforcement where needed



Questions and Next Steps

THANK YOU!