Pension System: Challenges and Perspectives for the Pension Insurance Industry

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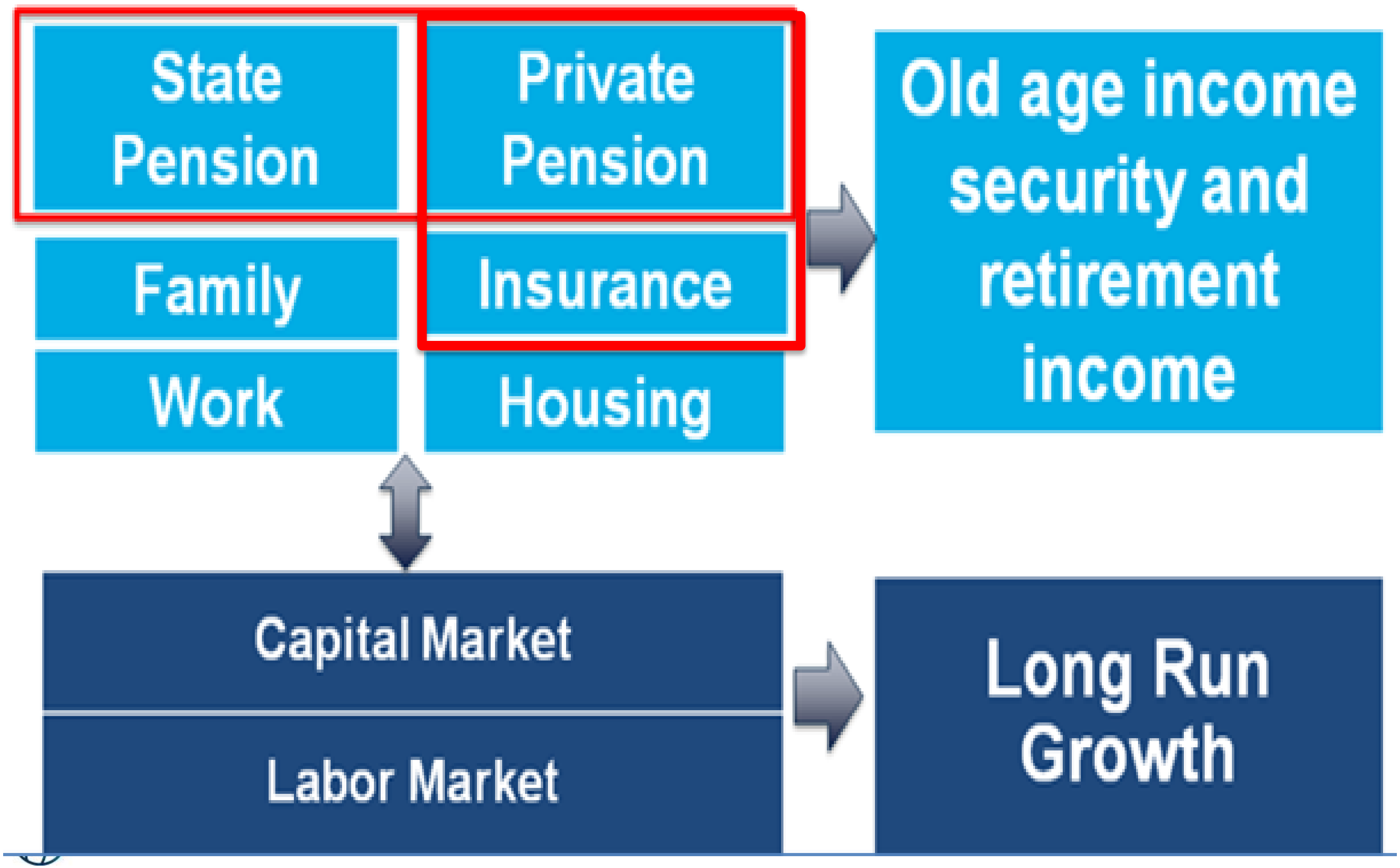
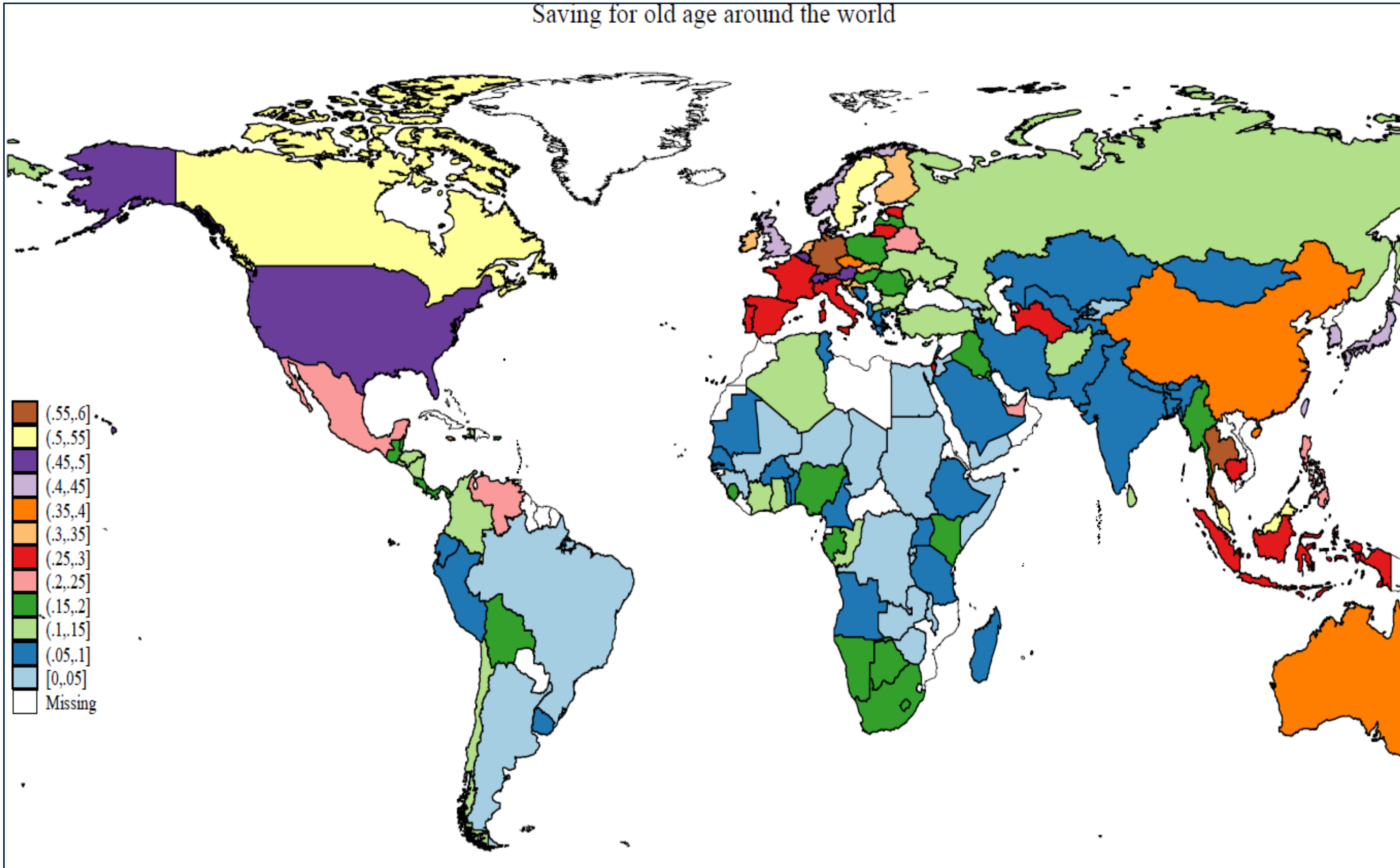
Mexico City

Providers of private pensions and insurance play a key role in delivering good retirement outcomes



There is a huge challenge to deliver saving for old age in nearly all countries



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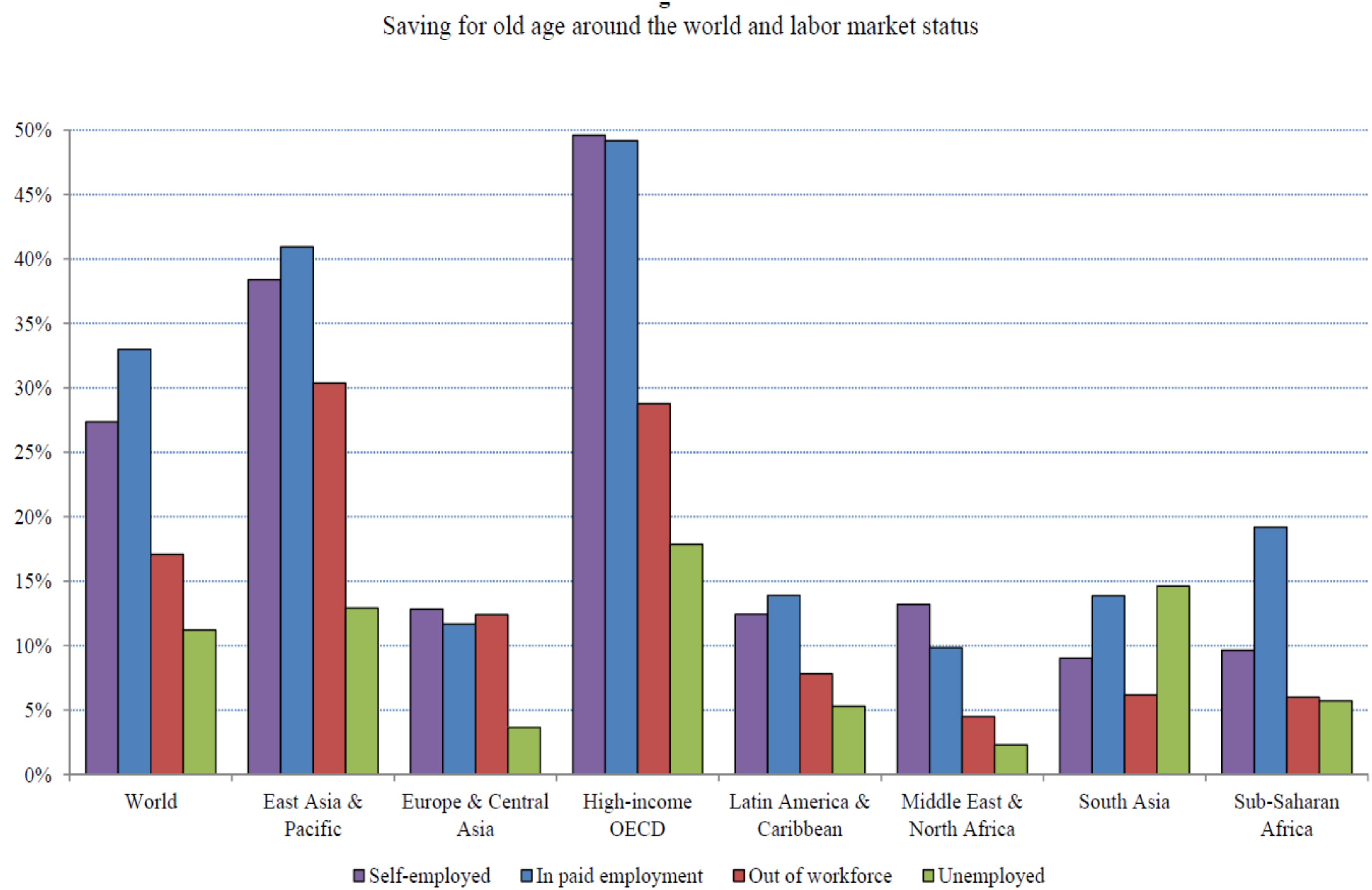
Source: Demirguc-Kunt, Klapper, Singer and Van Oudheusden, 2015 using weighted averages from Global Findex Data.

Pension and savings varies by region and labor market status – with informal coverage the biggest challenge



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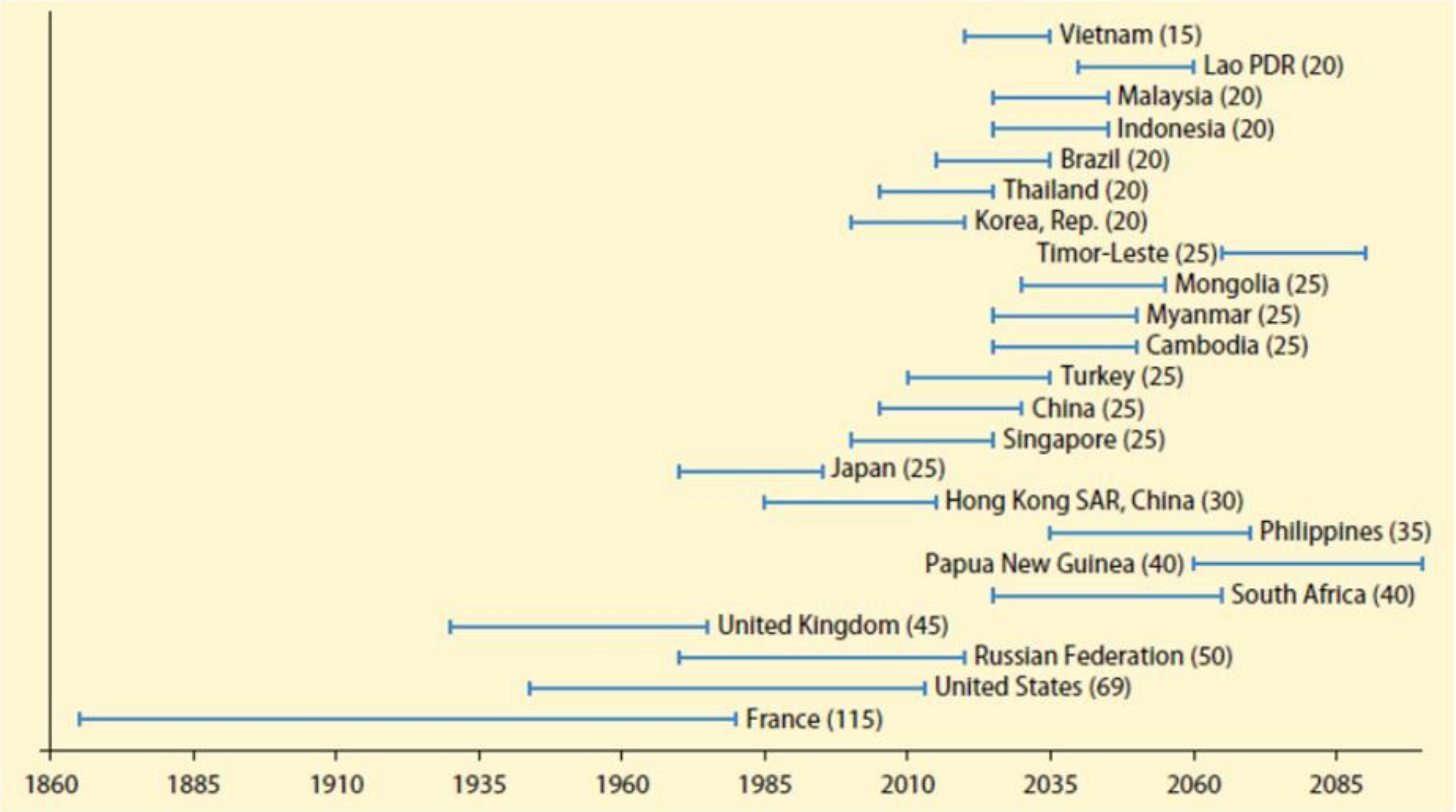
Source: (Demirgüç-Kunt, Klapper and Panos, 2016 using weighted averages from Global Findex (2015) data)

Rising longevity and falling birthrates are pervasive – and the speed of change is a particular challenge



Sources: World Bank estimates based on data from UN 2013 and Kinsella and He 2009.
Note: Figure shows starting and ending year for transition from 7 percent (aging) to 14 percent (aged) of population ages 65 and older. Aging and aged thresholds are based on United Nations definitions. East Asia and Pacific economies rounded to five-year increments.

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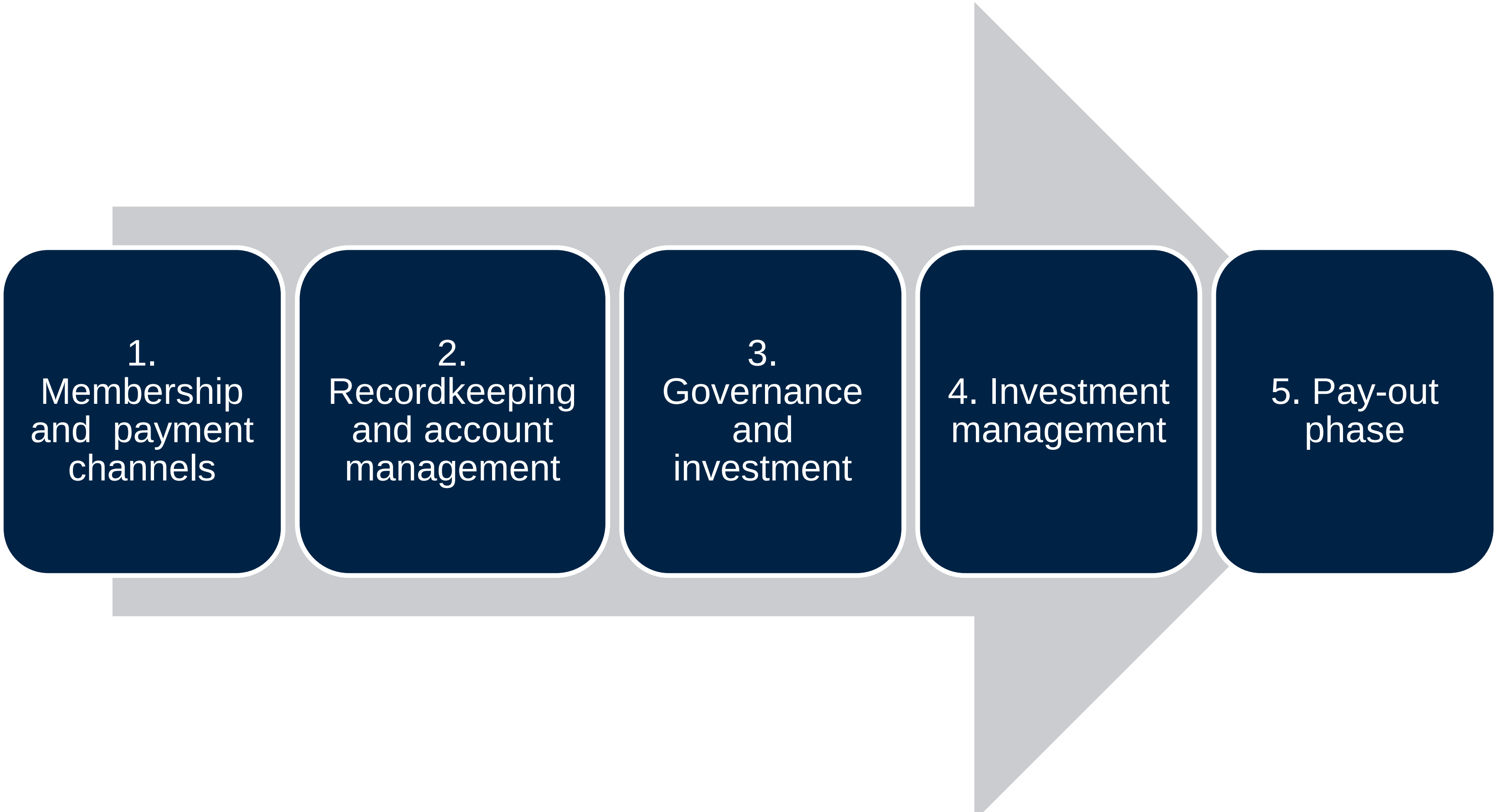
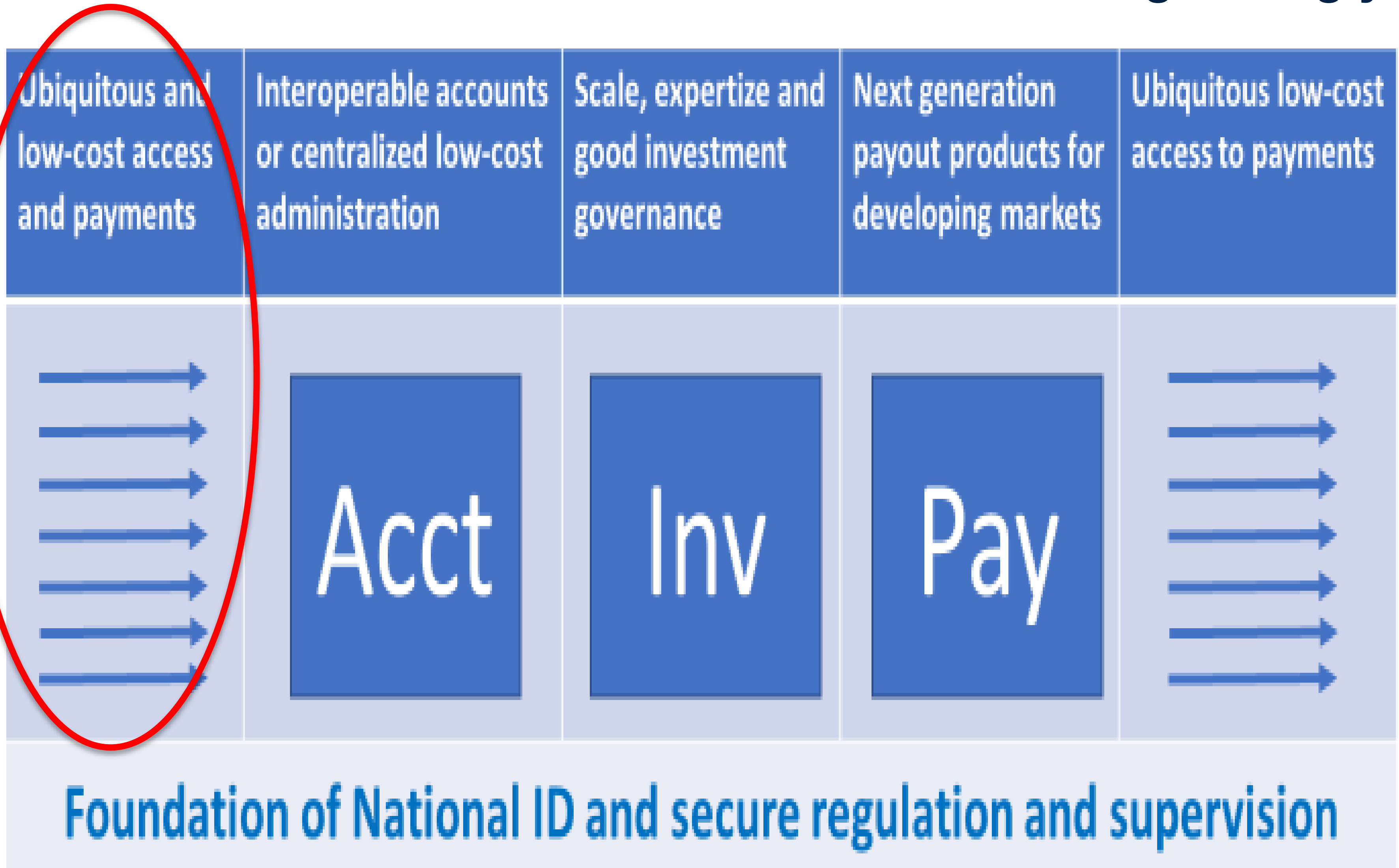
The contribution of any part of the private pension system can be judged by how it improves overall outcomes

Pension Outcomes and some Private Pension Contributions	
Efficiency	Reduce costs that ↑ returns Improve asset allocation to improve risk/return trade-off Enhance labor market flexibility between sectors
Sustainability	Cut excess employer plan deficits Reduce burden on public pensions/enhance diversification Build trust & support in LR pension
Coverage	Expand coverage for workers Improve gender equality Reduce incentives for informality
Adequacy	Complement income from public plans to cut poverty in old age Reduce leakage of assets pre retirement Turn assets into long-term income – reduced use of lump sums
Security	Deficit recovery plans supervised Assets separated and ring-fenced Reduce pre-retirement investment risk

To expand pension coverage and improve payouts (in addition to the need for public provision) requires a radical re-think of the pension value chain



Important to rethink 'how' to get people into pensions and make contributions – where Mexico is innovating strongly



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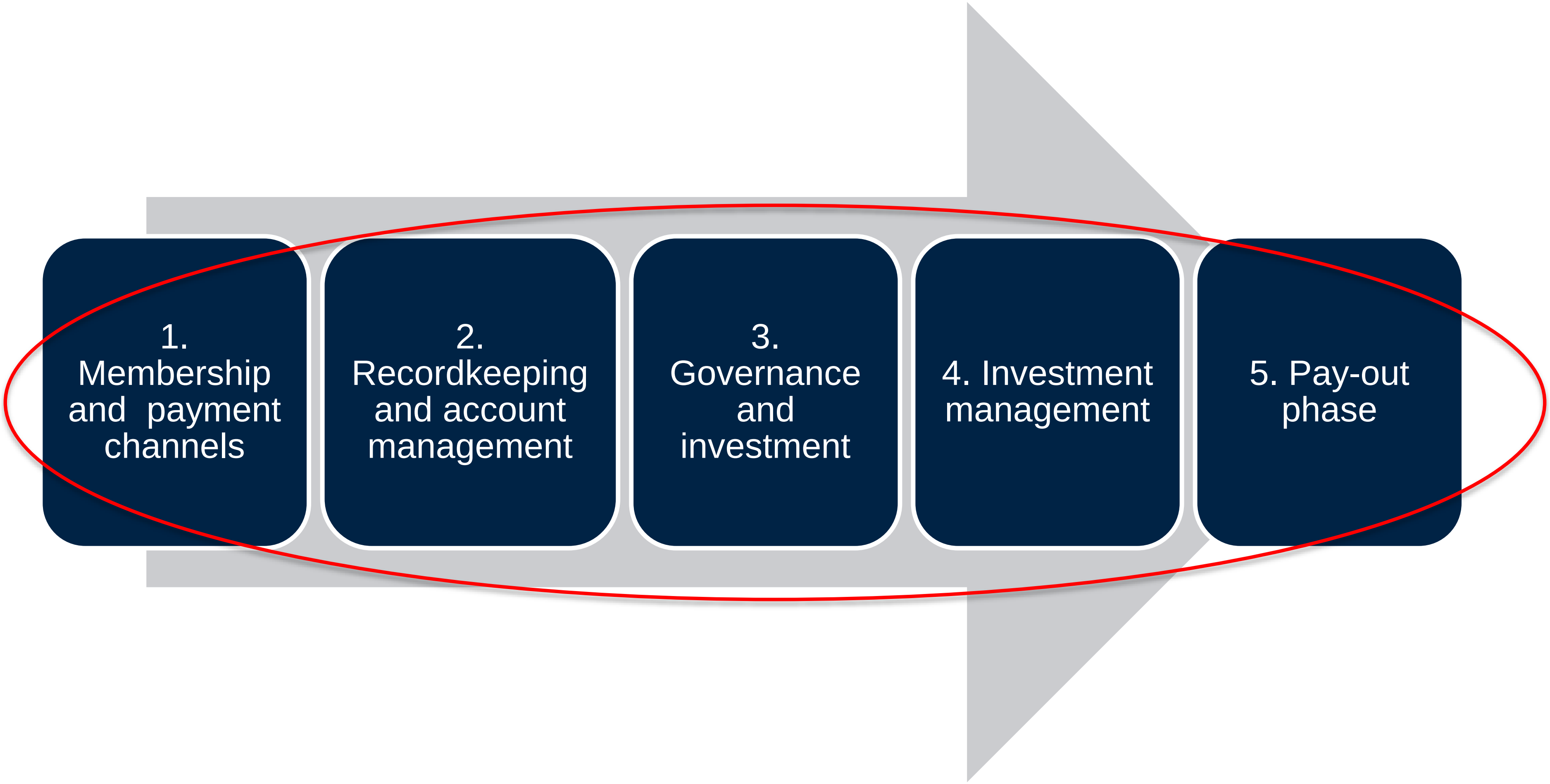
Source: Seth Khanna, Price and Bhardwaj (2017)

A key challenge for pension insurance companies is whether the vertically integrated model can match the very varied labor market journeys and deliver the cost, return and governance demands for good quality plans



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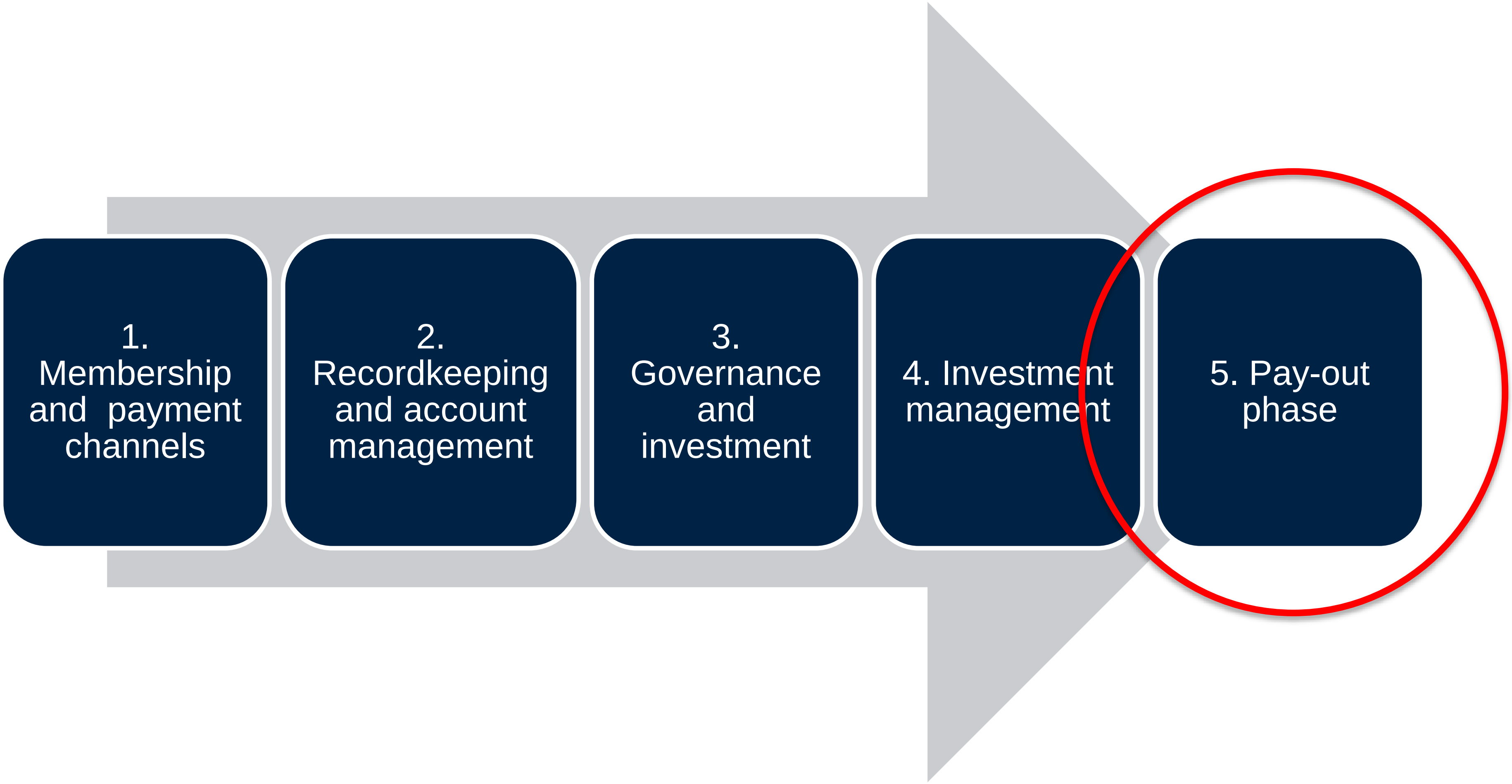
The payout phase



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There are (too) many ways in which pension assets are paid – with different implications for benefits, risks and complexity

	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

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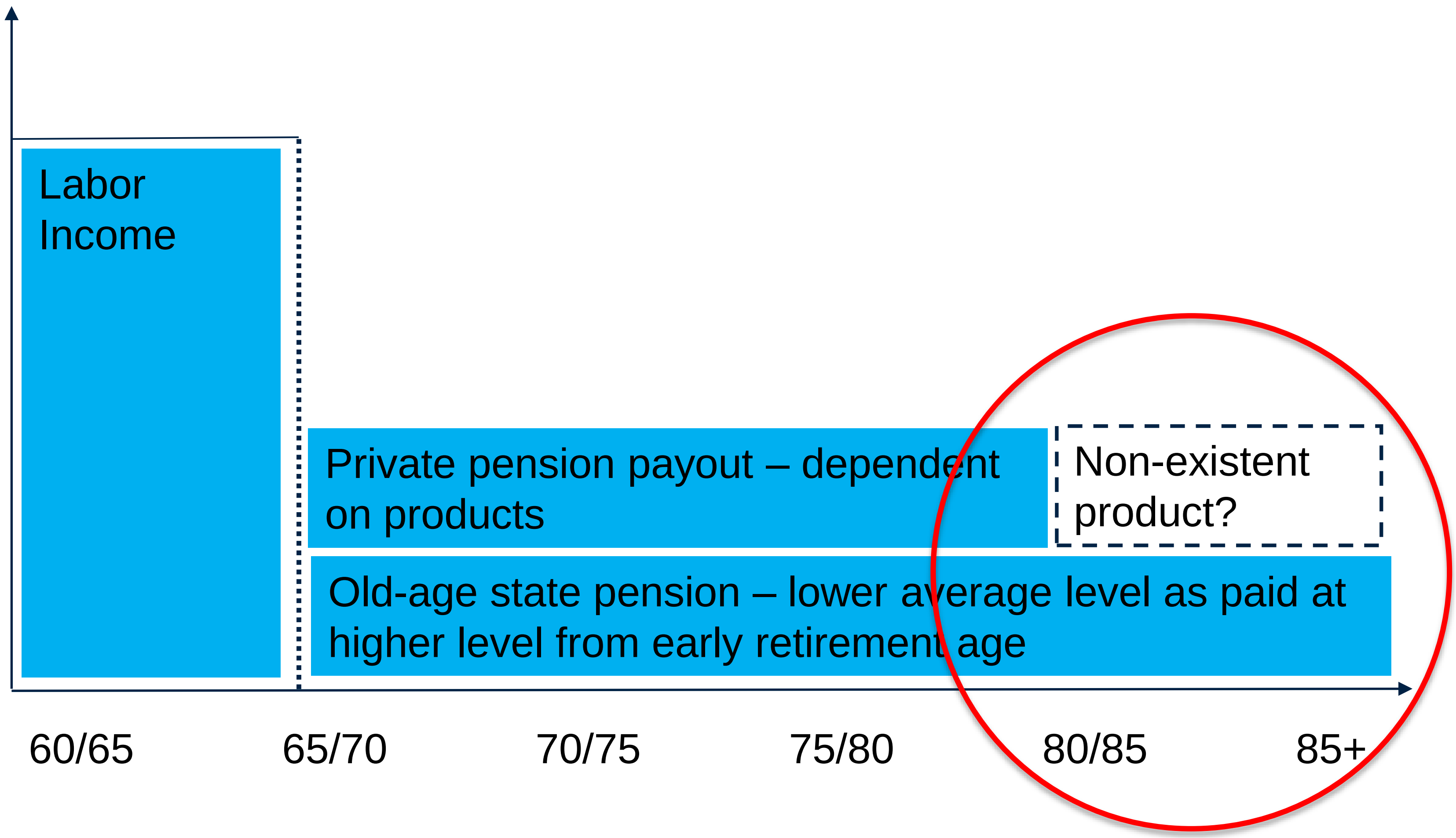
A fundamental challenge for a pension system is how to translate assets into income in retirement – particularly for the 'toxic tale'



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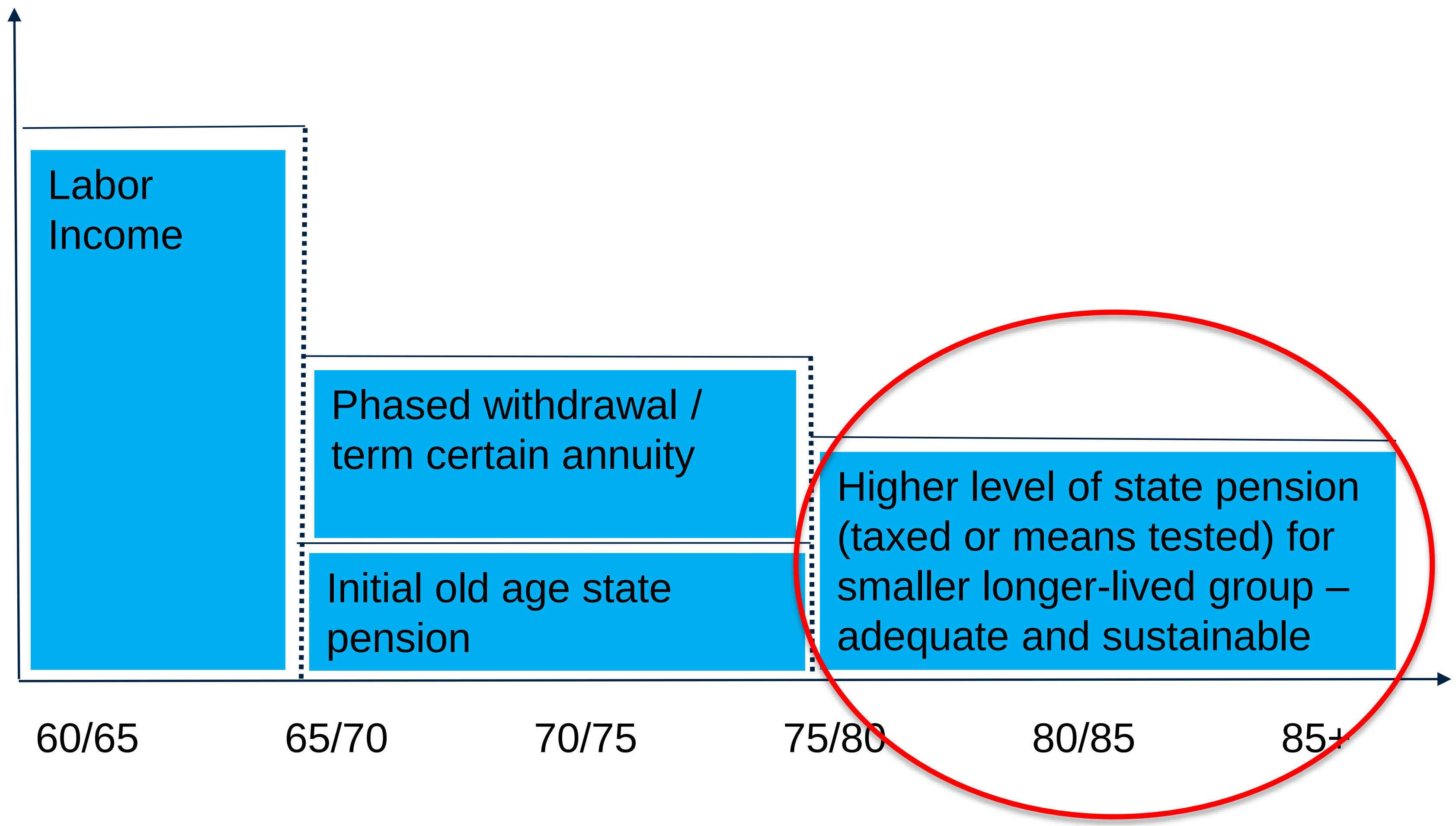
Source: Price (2017)

Governments take on longevity risk in zero and first pillars, but this creates sustainability issues. But non-government sources of income till death can be challenging. One option is to split government payments into two parts for early old age and late old age – and focus private payouts on the 'easier' part



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Source: Price and Inglis (2017)

The switch to higher payments for older cohorts saves money in relation to the population shares at different ages

Table: 2 Percentage of population 60+ and 80+ in selected countries: 2015, 2050 and 2100

Year	2015			2050			2100		
Country	60-80	80+	60-80/ 80+	60-80	80+	60-80/ 80+	60-80	80+	60-80/ 80+
World	11	2	**6.2**	17	5	**3.8**	20	8	**2.4**
Bangladesh	6	1	**6.8**	18	4	**5.0**	24	14	**1.7**
Brazil	10	2	**6.8**	23	7	**3.4**	24	15	**1.6**
China	14	2	**8.5**	28	9	**3.1**	23	17	**1.4**
Germany	22	6	**3.8**	25	14	**1.7**	24	16	**1.5**
India	8	1	**8.9**	17	3	**5.9**	24	10	**2.3**
Indonesia	8	1	**10.7**	17	2	**7.3**	23	6	**3.5**
Mexico	8	2	**5.4**	19	5	**3.6**	24	16	**1.5**
Nigeria	4	0	**21.5**	6	0	**20.0**	14	2	**8.0**
Russia	7	1	**6.7**	13	2	**6.7**	21	7	**3.1**
South Africa	17	3	**5.5**	24	5	**4.6**	20	8	**2.7**
UK	18	5	**3.9**	21	10	**2.2**	21	14	**1.6**
US	17	4	**4.4**	20	8	**2.4**	21	12	**1.8**

Source: United Nations (2015)

Annuity provision is very hard even with deep annuity markets and good mortality data. The Swedish second pillar provides a payout until death but with assets remaining invested and mortality repricing

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

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

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

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

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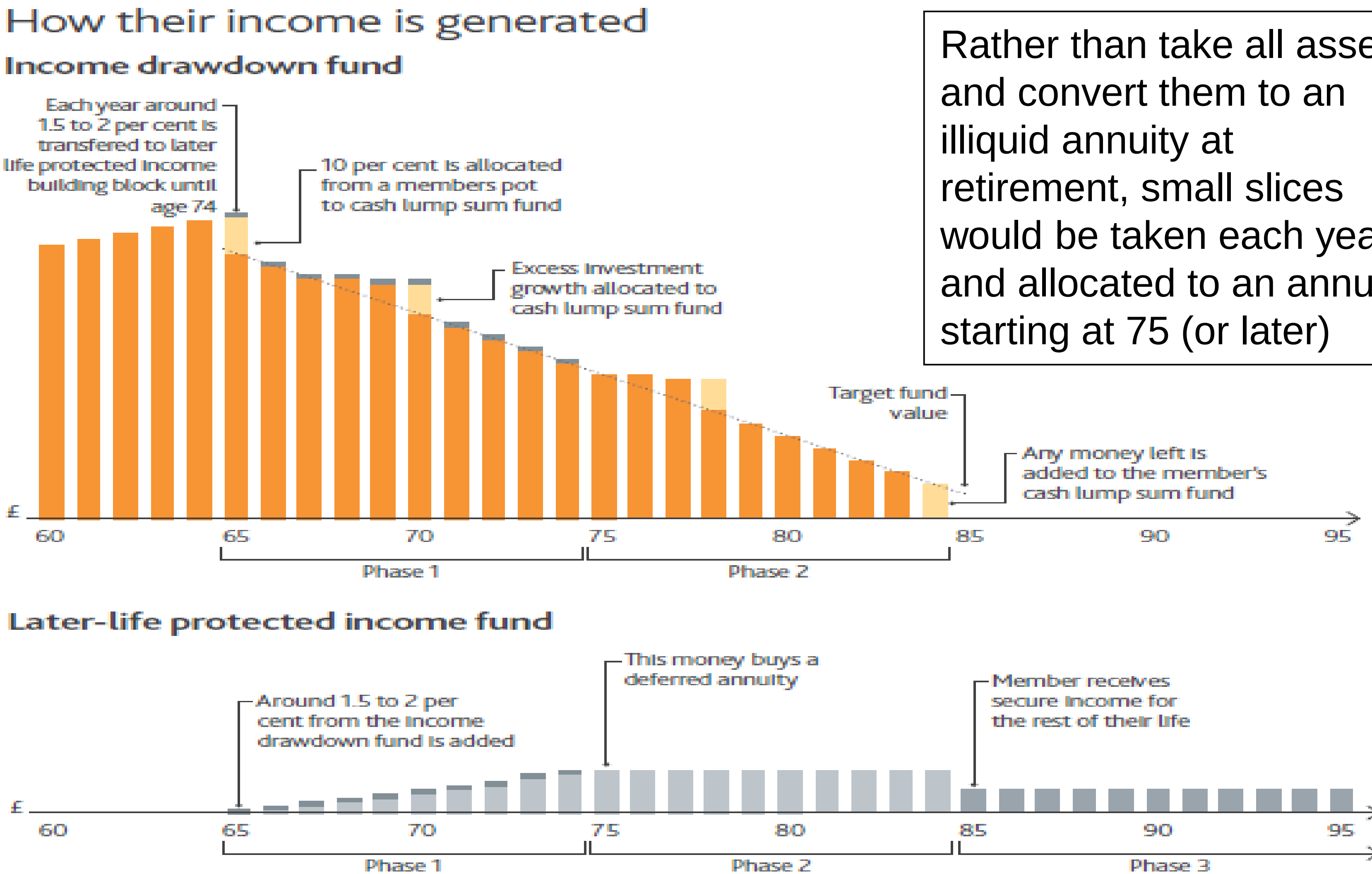
Source: Orange Report 2016

Phased or systematic withdrawals are becoming more popular for a range of good (and bad) reasons

- 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 (though see market structure later)
- But phased withdrawals do not give a guarantee of income until death – annuities are ‘expensive’ because they provide a valuable guarantee
- The right payout will depend on whether there is a generous public pension - one argument why in Australia lump sums were allowed
- But even in Australia there is dissatisfaction with whether the payout phase is actually delivering what is really needed from a pension pillar
- If phased withdrawals are used then decisions are needed on drawdown each year and investment strategy – and members will find those tough to understand – increasingly so as they get older
- Phased withdrawals can be ‘naïve’ e.g. paid out in full over 10 years, annuity-like – using an annuity formula linking payments to interest rates and life expectancy, or use a ‘rule of thumb’

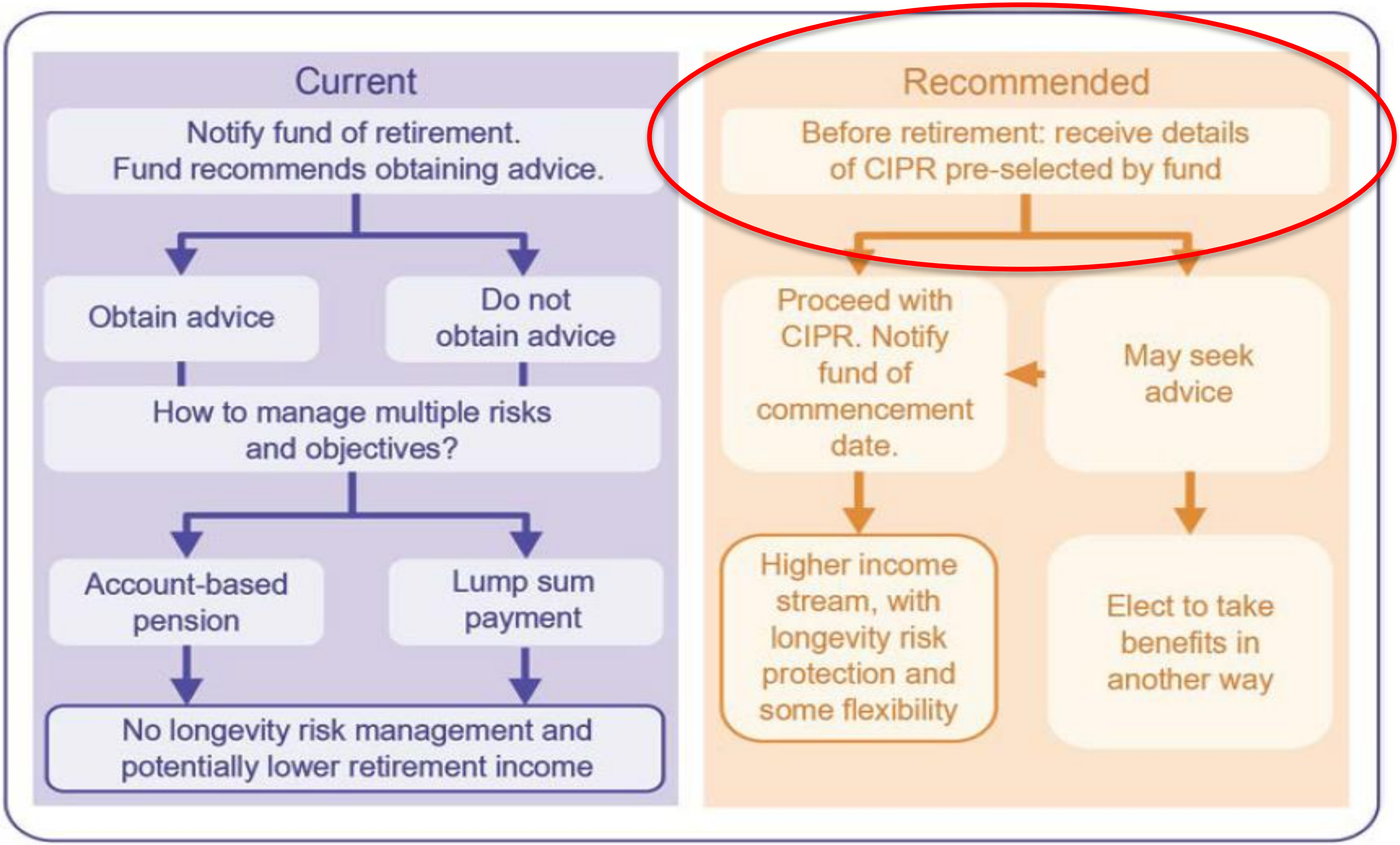
One innovation is to combine phased withdrawals with deferred annuities to make each part simpler to provide - innovation forced in the UK by mistaken removal of requirement to take an income product



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)

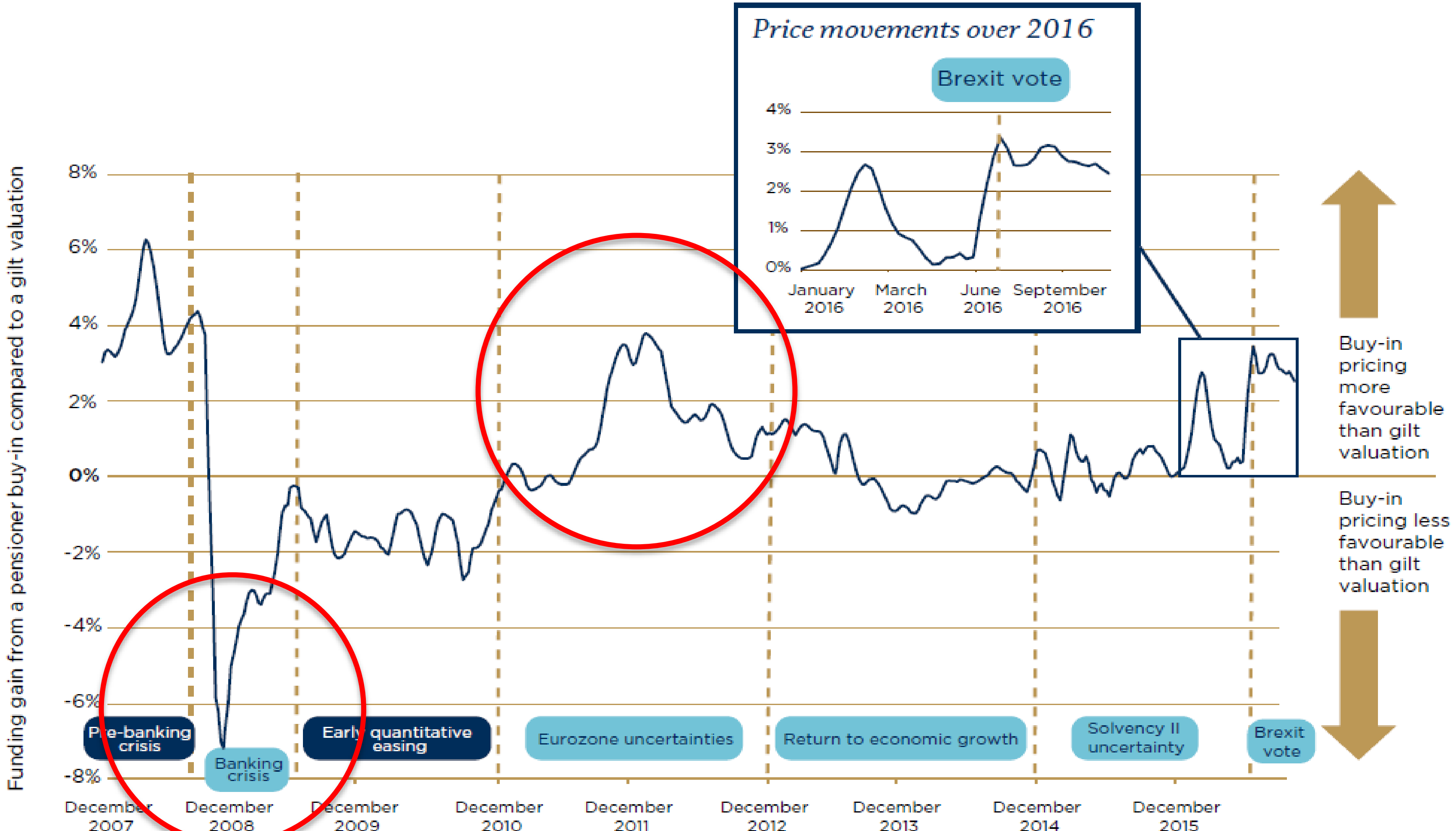
Source: NEST Pensions UK 'A Blueprint for Retirement Income'

Well-respected systems like Australia realize the need for change to help members get good default payout products



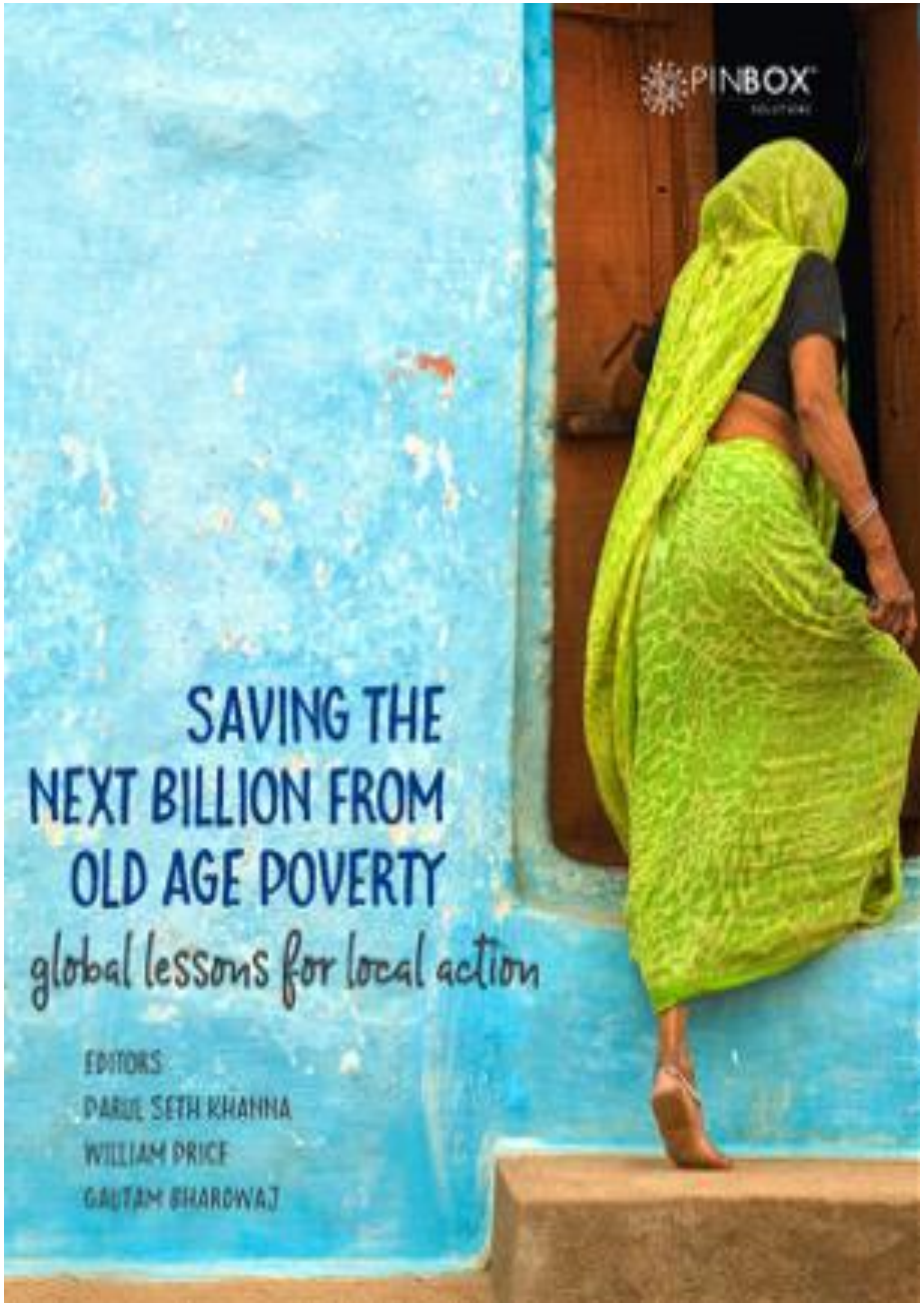
Source: Financial System Inquiry: Final Report November 2014, Commonwealth of Australia

Auctions as in Chile can add value and scale (and protect members) but there are other ways to use scale and governance to improve outcomes – for example bulk purchase of annuities by the accumulation vehicle



Source: LCP analysis

Recently published book pulls together 10 chapters on each stage of the value chain and 13 country case studies to illustrate challenges and solutions to expanding coverage and improving the payout phase



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