

# Mission to Indonesia, October 2022

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International Labour Organization

Meeting - October 2022

Financially supported by:



ILO/Japan  
Multi-bilateral  
Programme

# ▶ Old-age benefit

## Delivered outputs

### Technical report

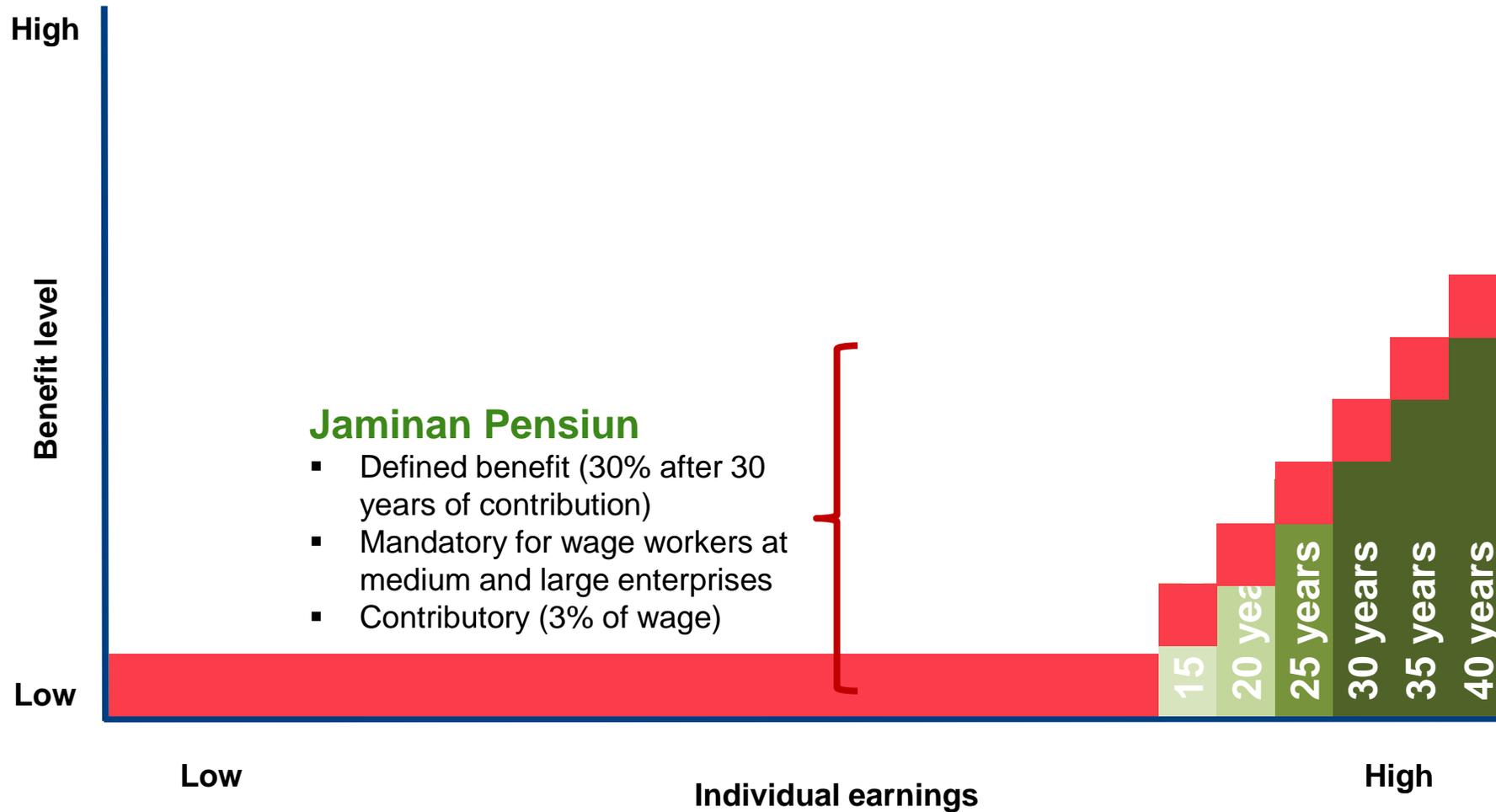
Forthcoming      Financial assessment of JP

### Recent event

Jul 2022      Bilateral meeting with KSP, MOF, BAPPENAS, MOM, DJSN, BPJS, workers, APINDO

Jul 2022      Tripartite meeting

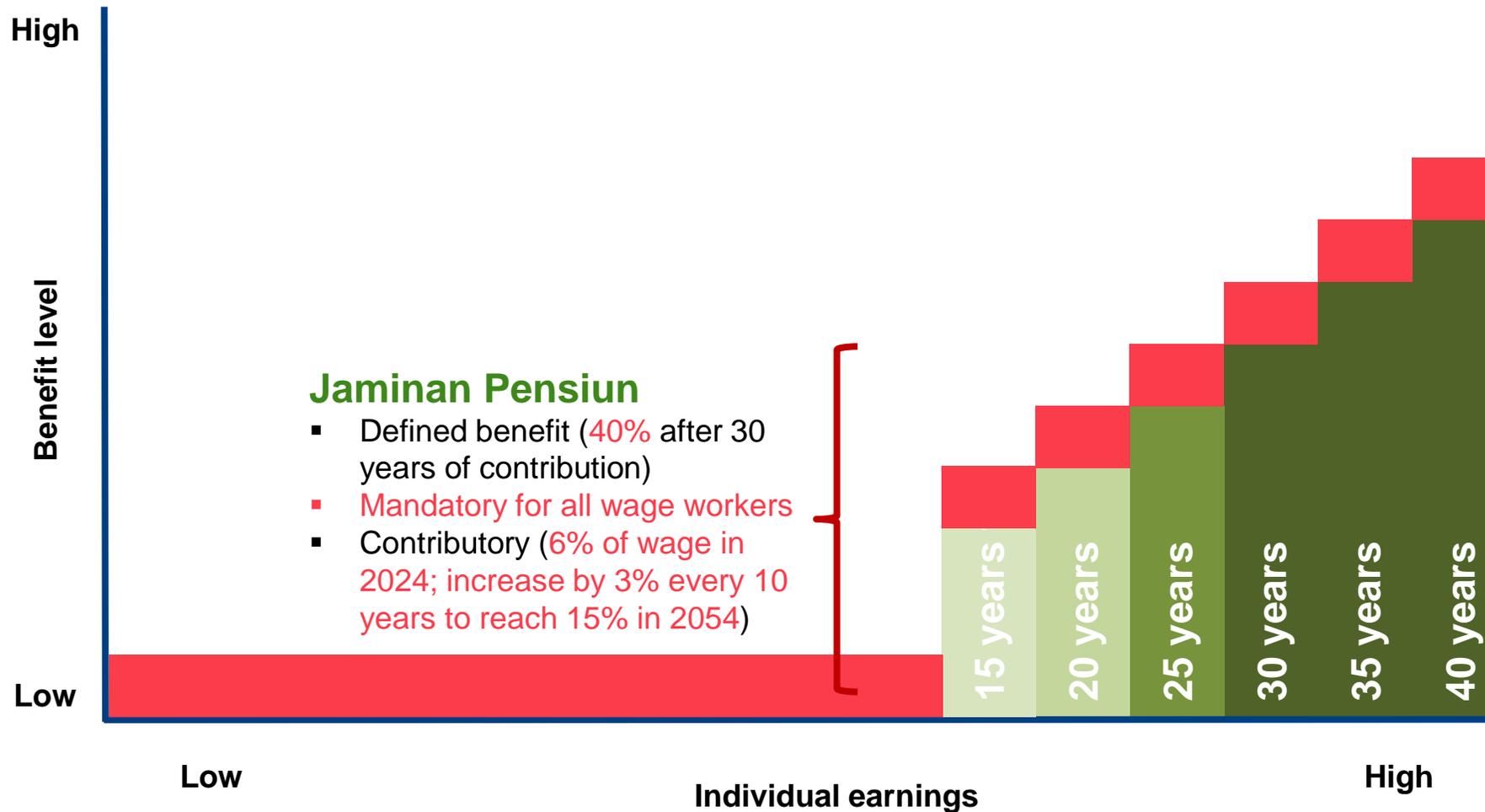
## Current system



### Jaminan Hari Tua

- Defined contribution
- Mandatory for wage workers at small to large enterprises
- Voluntary for micro enterprise and non-wage workers
- Contributory (% of income)

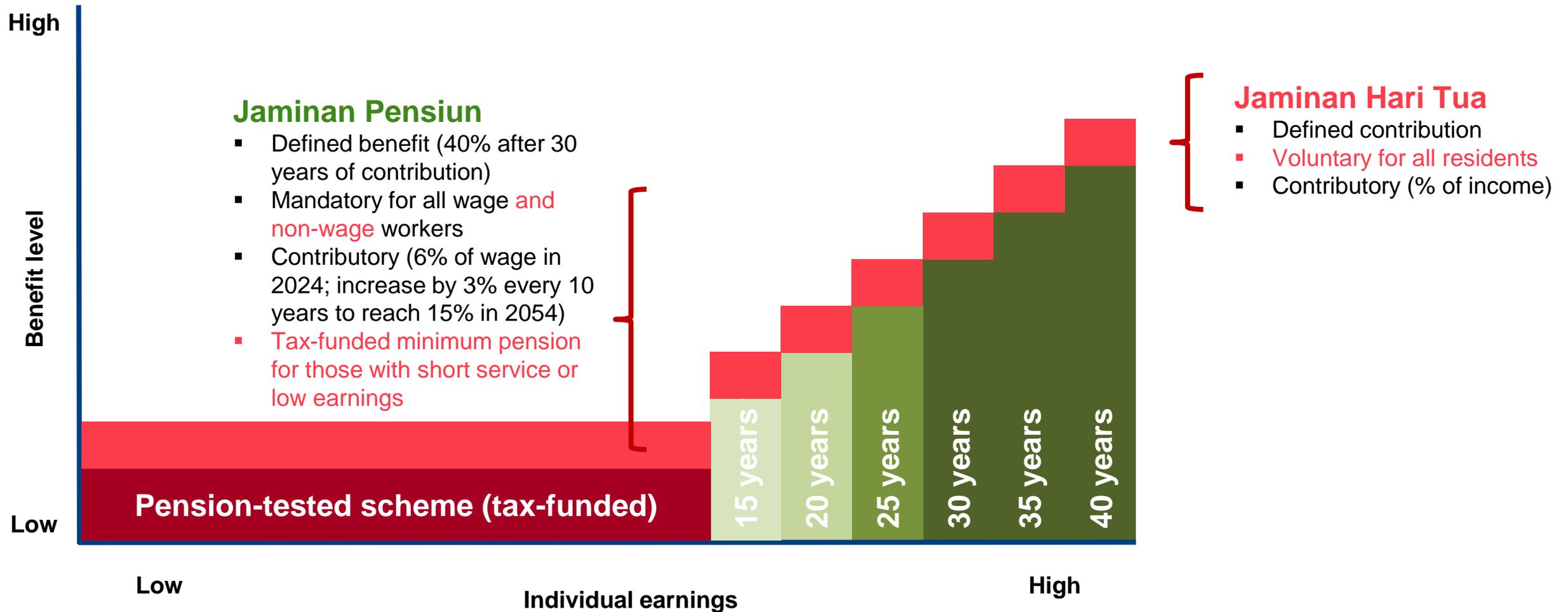
## Extension of Jaminan Pensiun only (Option 0)



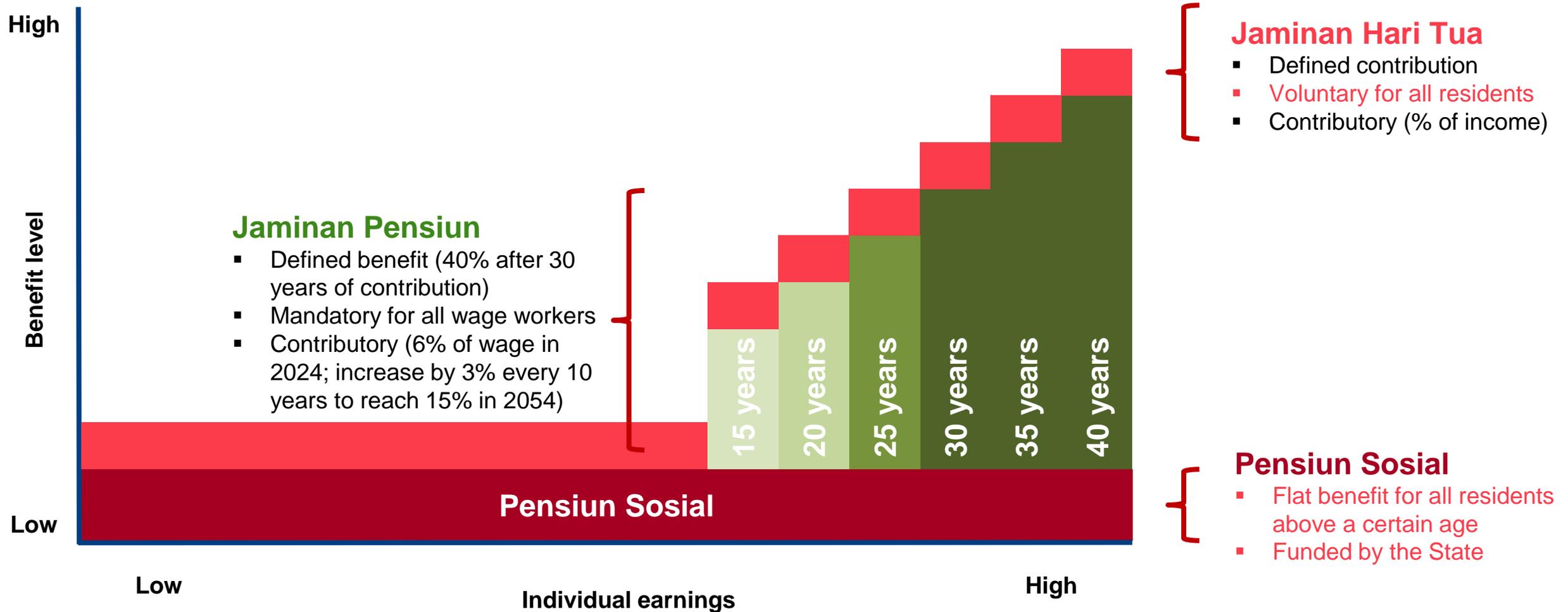
### Jaminan Hari Tua

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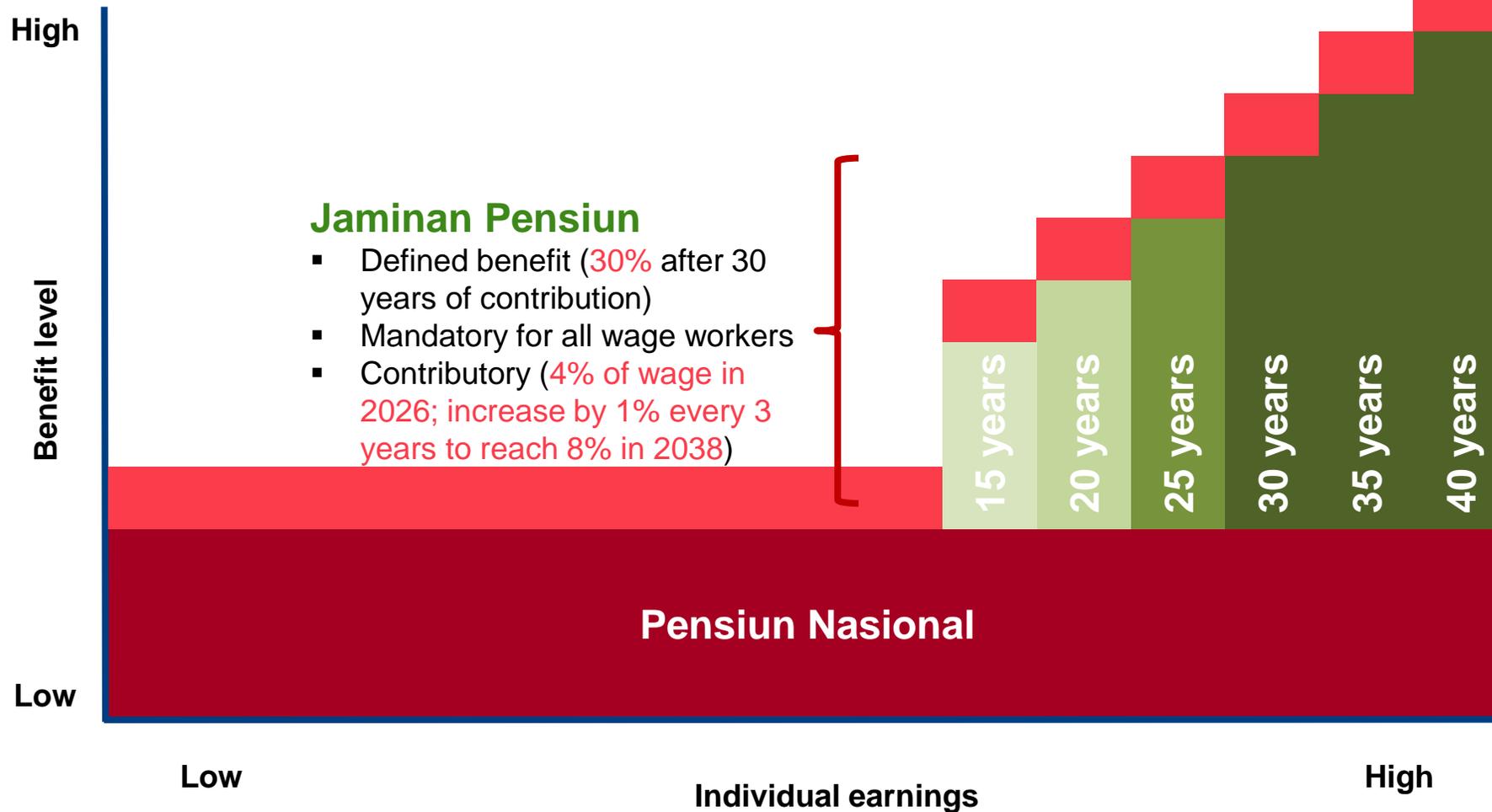
## ► Tax-funded scheme within Jaminan Pensiun (Option 1)



## Social Pension (Option 2)



## National Pension (Option 3)





► *Pension reform : key themes and international practice*

Simon Brimblecombe, Head of Regional Actuarial Services  
Unit, ILO Bangkok

► **Key messages: pension reform experiences shows us that...**

*A well structured **multi-tier retirement system** - with a key role for Defined Benefit social security provision – is the best way to ensure adequate benefits*

*Commitment to - and rethinking of - **financing approaches** to strengthen social security is needed*

*Transition to **higher but flexible retirement ages** is inevitable*

*Systems must reflect the new realities of the **labour market** .. but also should influence labour market measures*

*The lessons of Covid can help us build **shock resistant** social security*

# Success of a system should be judged against its objectives

Each country is different but fundamental aims common:

1. *Provide Adequate benefits*
2. *Financially Sustainable*
3. *Redistributive tool*
4. *Universal coverage*
5. *Support labour market aims and economic strategy*
6. *Other secondary aims – eg capital market development*



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# Global Pension Reforms

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# Social security then and now

<b>Bismarck 1880s</b>	<b>Social security today</b>
Retirement age 70; Life Expectancy 45	Retirement Age 60-65; Life expectancy 75-80
One career / one employer	1-3 careers / several or no employers
Full time or no time	Seasonal, part time, 'self-employed' etc
Men worked; women stayed at home	Men and women work
Families with 4-5 children	Families with 1 or 2 children
Live close to your parents	Live far from your parents

Is Social security still fit for purpose ?

# Yes but...

- Social security needs continual reforming
  - Benefit levels
  - Retirement Ages
  - Financing Mechanisms etc
- Covid19 showed the importance of social protection in
  - Reducing inequality and strengthening social cohesion
  - Building up human capital
  - Creating sustainable economic growth
- But in our 'heterogenous' world, one tier cannot do everything

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# Multitier systems

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- A retirement system has multiple objectives: unlikely that one benefit structure can meet all of them
- Population increasingly heterogeneous with different expectations and needs
- Diversification of risk in benefit provision AND financing
- Secondary objectives of retirement systems are important and reflected in multitier systems



# What is a tier ?

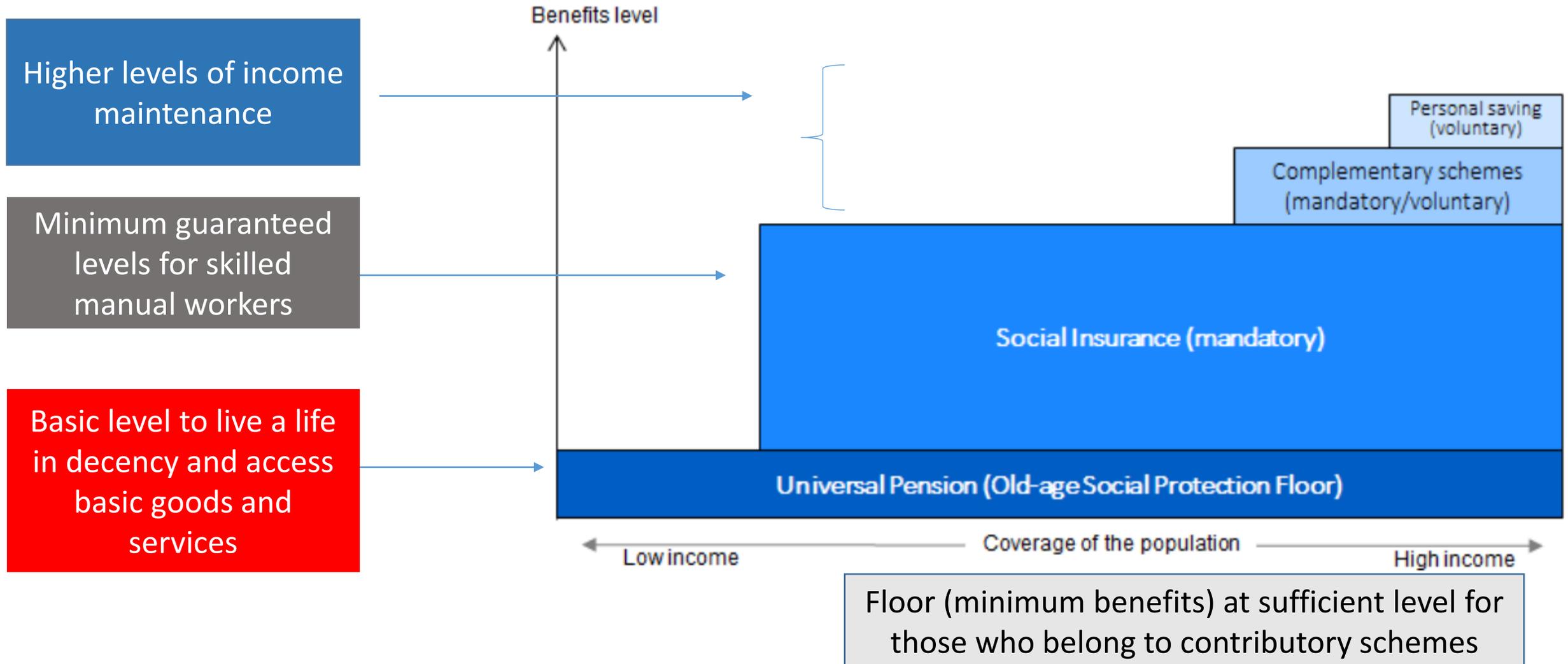
**Tier 0: The pension floor**

**Tier 1: Social insurance**

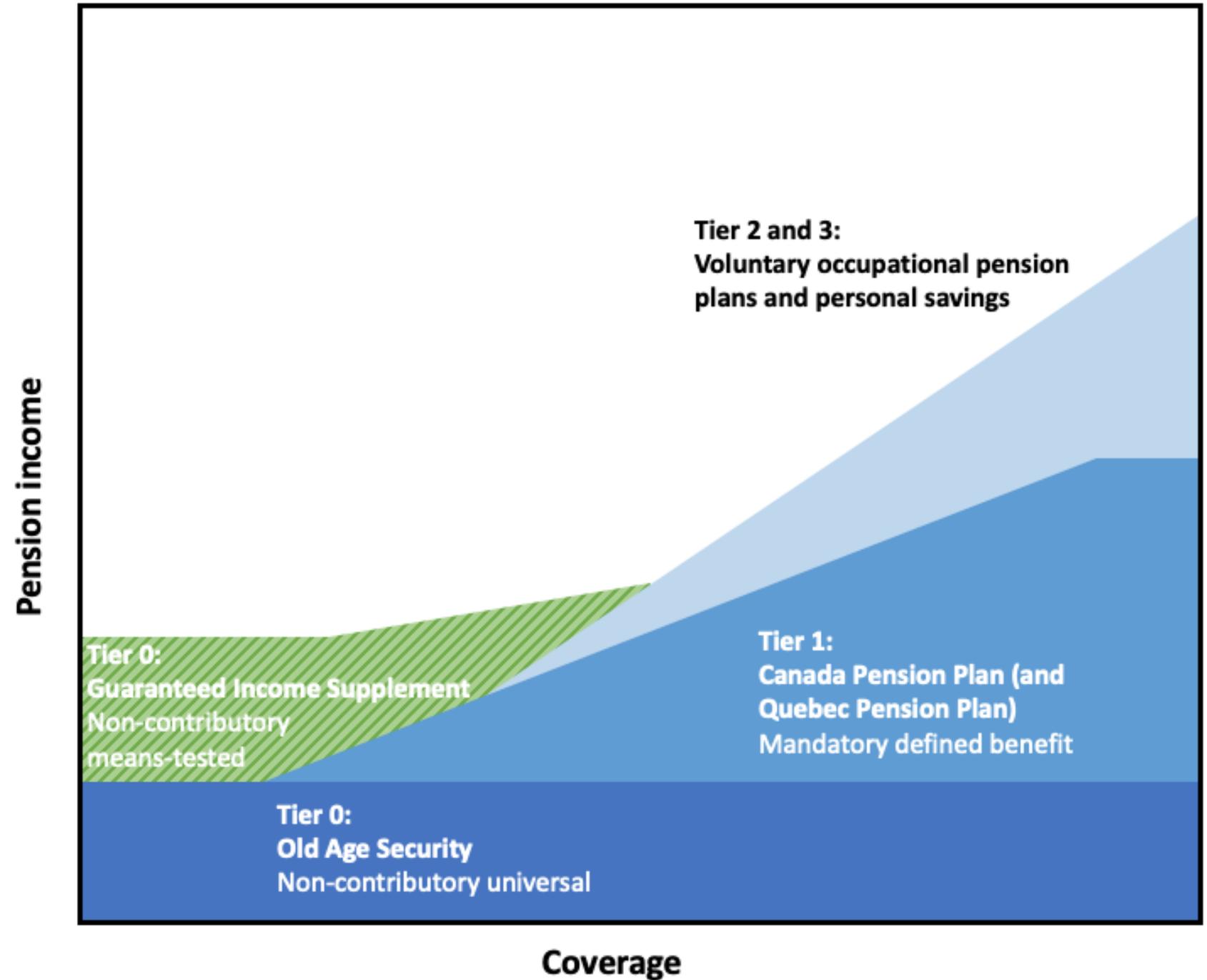
**Tier 2: Complementary schemes**

**Tier 3: Voluntary personal savings**

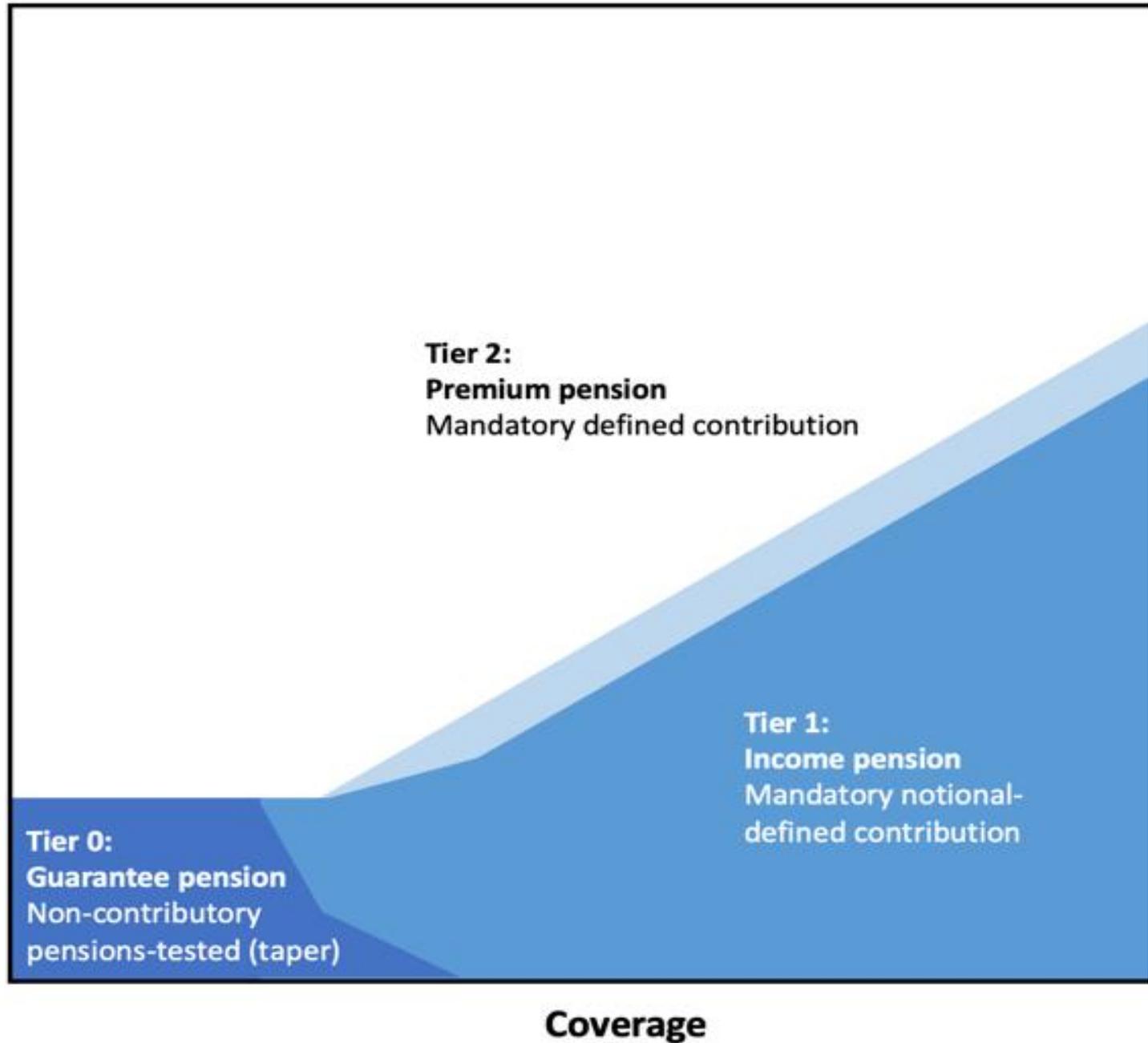
# ILO multi-tier framework



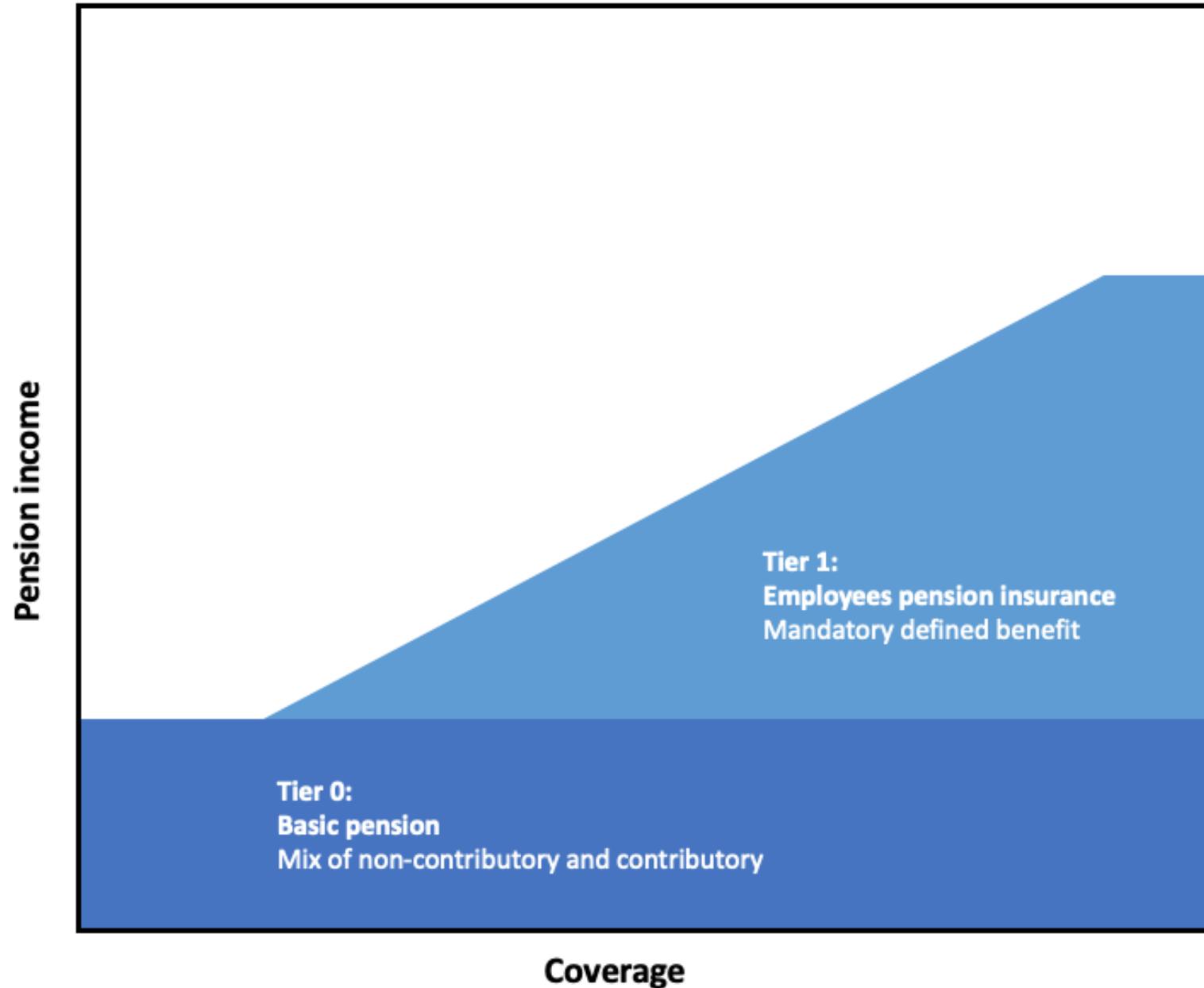
# Canada



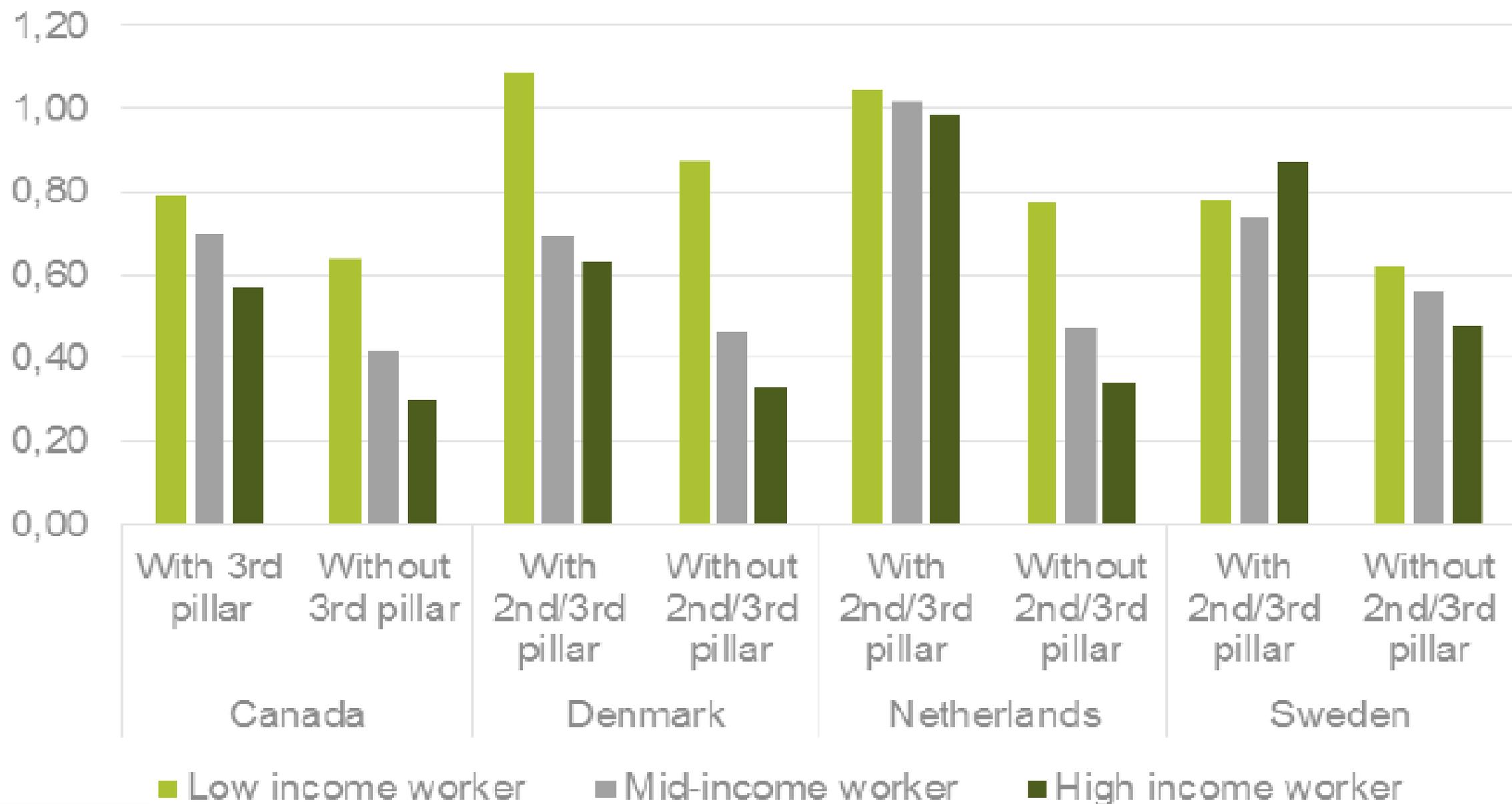
# Sweden



# Japan



## Net replacement rates for full career workers with and without private supplementary coverage



# Checklist of a successful Multi Tier System

1. Does it provide an (overall) **adequate & predictable** benefits to most of the population ?
2. Is there **coordination and consistency** between tiers ?
3. **Incentives**: are individuals and employers incentivised to join and contribute ?
4. Does the system support labour market aims & reflect labour market realities?
5. Can we administer and manage it ?
6. Communication: does the population understand the system ?
7. Is the system sustainable and does it support intergenerational equity ?

# Financing



125,058	154,568	95,054	124,500
125,487	56,845	97,511	125,000
124,000	110,000	99,011	154,000
150	150,000	99,216	95,000
	35,000	101,090	154,200
		101,684	110,000
		101,962	89,000
			50,000
			700

## ▶ Adapting social security financing to rapid ageing & the future of work

### Key challenges

Populations ageing so costs for the same benefit level are increasing

Pressure on the contribution base (covered earnings)

A focus on pensions but financing health benefits increasingly complex

Avoiding a silo approach - multi-tier and consistency across provision is the focus

### Key financing principles

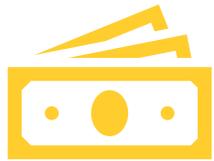
Financing mechanisms should be (perceived) as fair between and across generations

Diversification of financing approaches reduces risk and allows for redistribution and other policy aims

In an ageing economy, human capital and innovation key drivers of growth not cost of labour

Financing and reform options should be considered together (eg change in retirement ages)

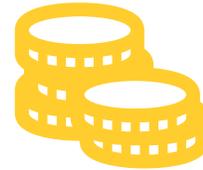
## ▶ Financing Considerations



Cost of  
Benefits



Who pays ?



Impact of  
financing



Timeframe of  
financing

## ▶ 1: Cost of benefits

- Decisions on level of financing required should be **evidenced based** (eg Canada)
- Different forms of provision (eg defined contribution individual accounts) **don't reduce the cost** – in fact they increase it as they are less efficient than pooled Defined Benefit financing
- Financing considerations should be considered together with changes in **provision** (eg UK)
- Paying less than required now means increased burden for **younger and future generations** at a time they will face enhanced impacts of climate change and scarcity of natural resources

## ▶ The actuarial valuation

An actuarial valuation is a projection of future cashflows of a social security scheme using appropriate data and assumptions

They are needed to assess the current and future financial situation of existing schemes, to cost new schemes and to assess reforms

The valuation must be carried out regularly by an actuary and conform to professional standards

# An actuarial valuation is a powerful tool

## To assess

- Financial sustainability of a system
- Coverage
- Benefit adequacy
- Financing and funding situation
- Equity and distribution of outcomes

## To understand

- Present and future financial development of a scheme
- Causes of present or possible future deficits
- Adequacy of benefit levels and system fairness
- Factors influencing the cost of a scheme and its sustainability

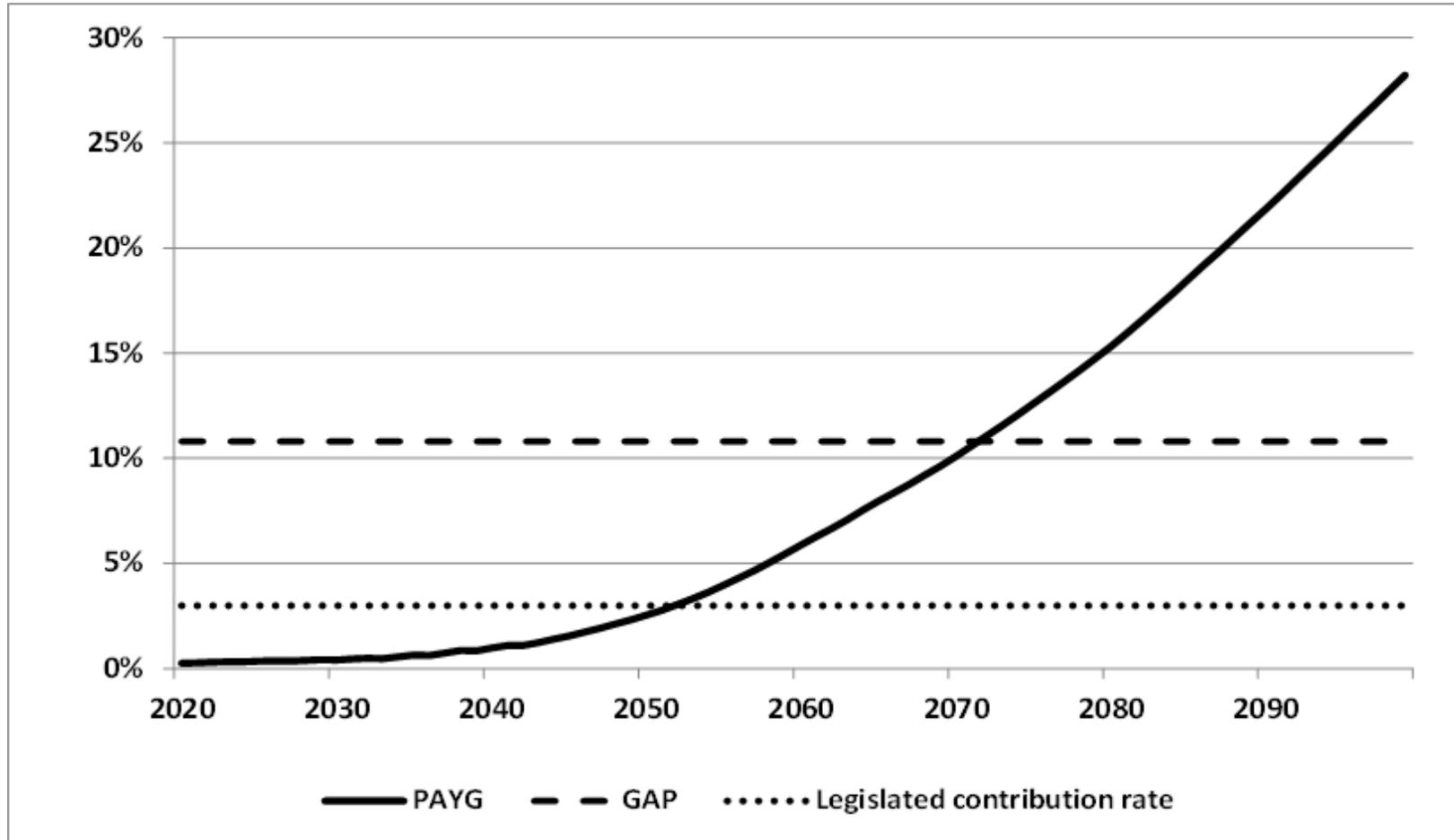
# Why conduct an Actuarial Valuation?

## To assist in decisions regarding :

- System design and reforms (benefit formula, contribution rate, retirement age, ceiling, health provision) – *some countries link directly policy changes with the actuarial valuation recommendations*
- Benefit design and calculations (level of benefits)
- Financing and Investment decisions
- Communication and disclosure

*Actuarial work is an essential element of evidence led policy making*

# Projected cost rates: JP



PAYG rate of the scheme steadily increasing over time. Equal to 28.2% in 2100.

General average premium (GAP): constant contribution rate to finance the scheme over 100 years

GAP estimated at 10.8%.

GAP significantly higher than the present contribution rate of 3.0%

## 2: Who pays?

- Reduction in labour share of gdp (to capital) over the recent years requires reflection of how to finance
  - *Employers benefit from social security so their contribution rates should reflect this*
  - *Ageing economies require shift away from lower cost of labour focus to support economic growth*
  - *If labour price is too low, this leads to mis-allocation of resources and economic distortion*
- Important that majority of costs are shared between employers and employees:
  - *Required to support adequate benefit levels (more so than if financed through Government transfers)*
  - *Better reflects cost of labour and investment in human capital*
  - *Contribution requirement increases interest and implication in scheme provision*
  - *Provides important incentive for those affiliated to push for others to do so*

### ▶ 3: What is the impact of financing ?

- Innovative economies do not focus on the cost of labour – higher labour costs encourages innovation and productivity increases
- Financing mechanisms should also be redistributive as benefit provision becomes less so with fragmented careers
  - Higher contribution rates on higher earnings and/or no salary cap on contributions
  - If there are subsidies, appropriate transition to higher contribution rates required

# Switzerland: Three Pillar system

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## Pillar I

### **Social Security**

- Fixed rate pension
- Contributions on all salary
- Pay as you go with a small reserve fund
- In some professions, financed bridging pension exists

## Pillar II

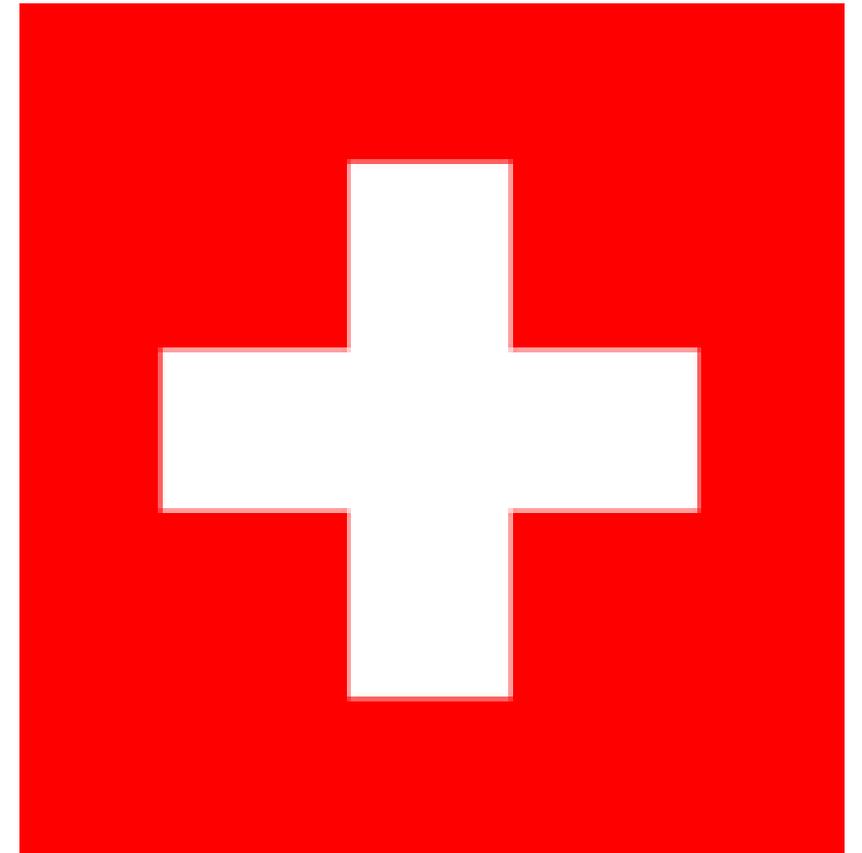
### **Employer sponsored provision**

- DB or DC\*
- Integration with social security
- Government regulates
- Funded; employer pays at least half

## Pillar III

### **Individual voluntary**

- Tax incentives
- Maximum cap



## ▶ 4: Timeframe of contributions and building up of reserves

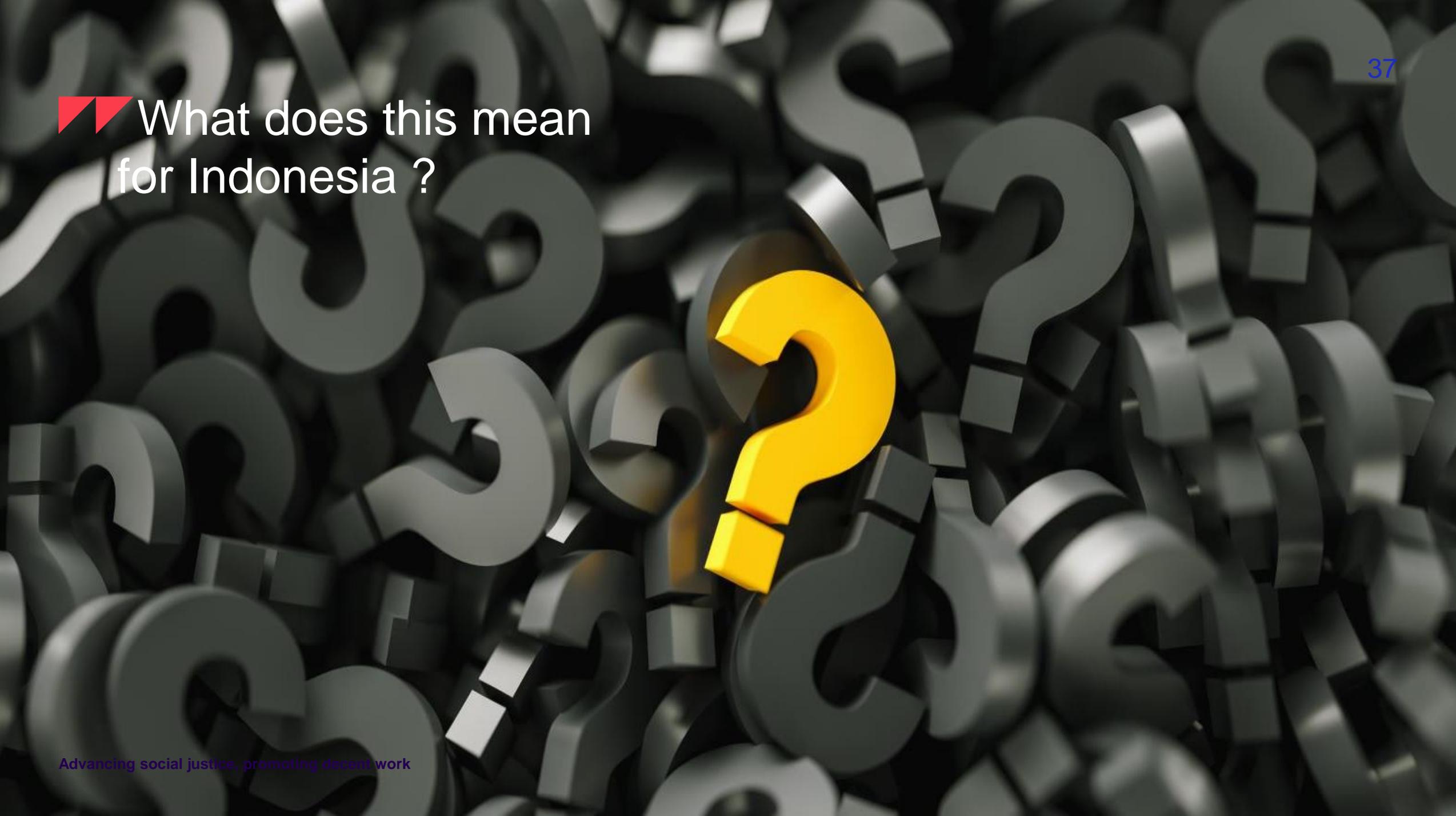
- Future benefits are paid out of future resources of the economy (tax revenue, contributions, assets) whether it is an individual defined contribution plan or pooled PAYG defined benefit scheme
- Building up social security reserves has many advantages if managed correctly:
  - Investment in projects which build productive capacity of the economy
  - Social security reserve funds can incorporate social and environmental externalities better
  - Pooling approach and long-term view allows for a more efficient investment process than other actors
  - They can also support other objectives such as risk diversification, developing capital markets, ESG and labour market aims
- Scheme design influences time horizon of investment
- They are not a ‘game changer’ in improving sustainability but support other efforts in this direction

## ▶ **Financing Approaches: international best practice**

- Acceptance that an adequate benefit requires employer and employee contributions
- Reserve funds a driver of more efficient capital markets and ESG
- Mixture of funding & pay as you go to diversify risks /support intergenerational equity
- Contribution rates safeguarded through crises
- Salary cap on benefits ; higher or no salary cap on contributions
- Incentivise sign up
- Energy subsidies / taxation re-think

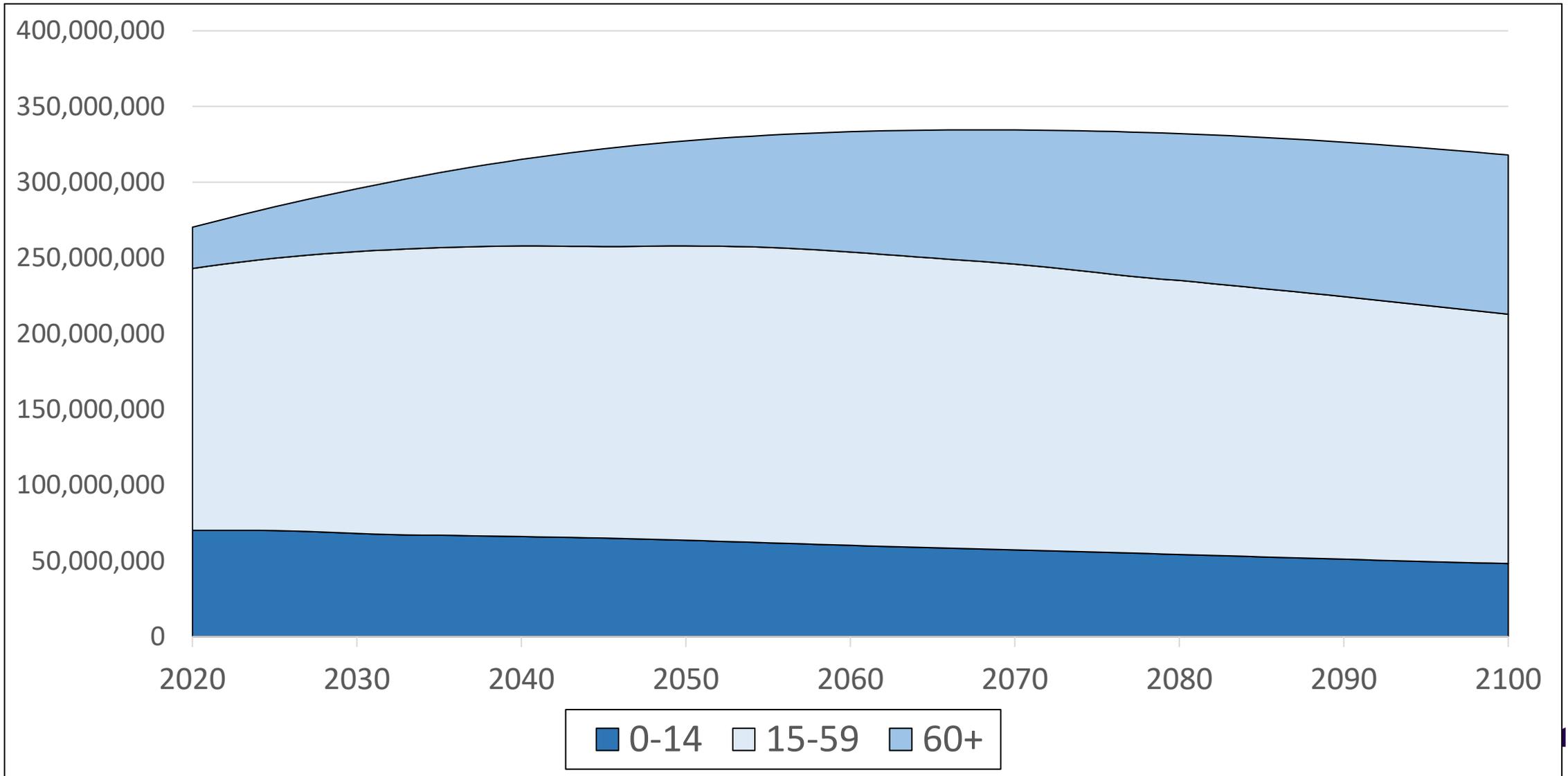
## ► What does the fragmented labour market change in all of this ?

- Move away from an idea of an ‘informal worker’ to whether there is an employer / employee relationship
- Fundamentals may not have changed but the approaches need to:
  - Use appropriate technology to collect contributions
  - Flexible payment conditions, good communication and compliance
  - Recognition that careers are more fragmented
- Financing mechanisms are an important lever in ensuring coverage (e.g. Japan) and reducing inequality, often more so than benefit provision
  - Sequencing – - increasing coverage and adequacy of benefits -> financing requirements



What does this mean  
for Indonesia ?

# Projected population of Indonesia, by age groups up to 2069



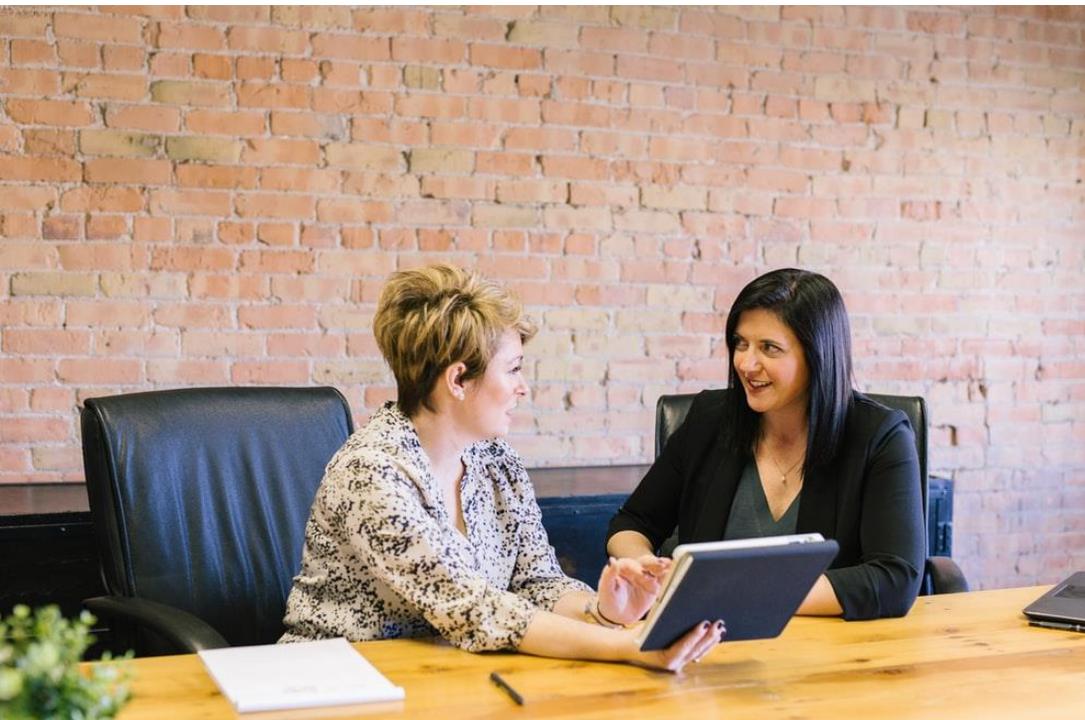
## Impact on retirement schemes

- Under current benefit design frameworks, future reforms will be needed
- This is common for all social security retirement systems
- Cannot just change one element, need to ensure other measures are put in place
- For example, if we increase retirement age, we also need accompanying labour market measures

Year	Ratio 16–59 / 60 +
2020	6.4
2030	4.5
2040	3.4
2050	2.8
2060	2.4
2070	2.1
2080	1.9
2090	1.7
2100	1.6



**Should we increase retirement age universally ?**



## ► *Transition to higher but flexible retirement ages*

The retirement age structure is a very effective tool in influencing

- *Adequacy*
- *Fairness*
- *Redistribution*
- *Sustainability*
- *Labour market practice*

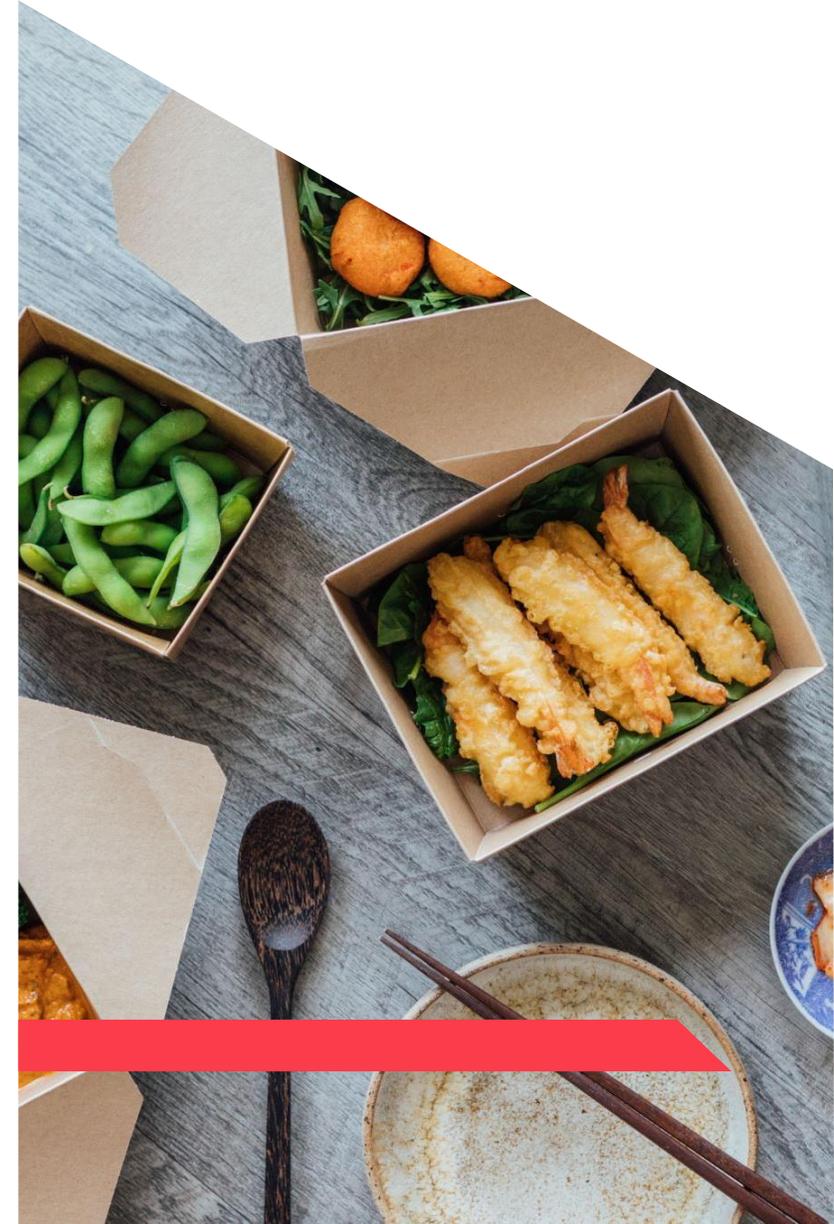
## Trends in Retirement age

- Window of retirement ages (Sweden)
- Encouragement of late retirement (Japan)
- Penalising early retirement (Korea)
- Age and service related retirement age (France)
- Retirement age linked to life expectancy (United Kingdom – Government Actuary)
- Gradual transition to higher retirement age (Singapore)
- Partial retirement (Finland)

## ► Social security Defined Benefit provision should be the key pillar

- **Defined Benefit pension – individuals can plan for the future... and make additional contributions**
  - China: 1% of average salary for each year of service (+ DC Funded amount)
  - Japan: Defined Benefit amount depending on service
  - Pension increases an important part of the package
- **Longevity and investment / financing risk taken on by social security institutions**
  - A regular income paid for life
  - Pensioners are risk averse and don't have the risk management skills and tools
- **Provision of additional benefits easier to organise and finance**

## Takeaways for Indonesia ?



# ► Unemployment benefit

## Delivered outputs

### Technical report

2020	<u><a href="#">International practices of income protection for unemployed persons and implications for Indonesia</a></u>
2020	<u><a href="#">Legal, financial and administrative considerations for an employment insurance system in Indonesia</a></u>
2020	<u><a href="#">Exploring policy options to design an employment insurance scheme in Indonesia</a></u>
2021	<u><a href="#">Actuarial analysis of a proposed unemployment insurance scheme in Indonesia</a></u>
Forthcoming	Review of JKP policies - Challenges and recommendations

### Recent event

Sep 2022      Tripartite meeting

# ▶ Investment

## Investment

### Training

Jun 2021	Investment governance principles and structures
Jun 2021	Liability driven investment and other constraints: mapping exercise of current to optimal processes
Jul 2021	Discussions around next steps – processes and deliverables: international practice and benchmarks
Feb 2022	Asset-liability considerations in Canada Pension Plan portfolio design



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# ► Investment Issues



## ► What are the investment objectives for the (different) BPJS schemes?

- Are they documented ? Consistent with the Funding Policy ?
- Are they reasonable, realistic, and implementable?
- Are returns measurable and comparable?
- Measures of risk ?
- Do they take into account liabilities ?
- How many objectives should a scheme have and at what level of detail are they most useful?

## ► What is the role of investment in social security schemes ?

Fundamental differences between investment strategy in:

1. *JHP*
2. *JT*
3. *JHK etc*

Good investment management is important because:

- *Returns strengthen sustainability (and reduce costs)*
- *Social security is responsibly investing 'member' funds*
- *Allows investment in areas where capital is scarce (eg infrastructure) / develops markets*
- *Reflects well on the image of social security*

## ▶ Focus on Investment Governance is critical



# Ingredients for successful investment management



Funding and  
Financing  
Policy



Good  
Investment  
Governance



Incentives  
& trust



Information &  
Communication



Organisation  
& representation

# Ingredients for successful investment management



Good legal /  
regulatory  
structures



Enforcement,  
Compliance,  
Monitoring



Coordination and  
integration



Effective  
Administration

## ▶ Investment Governance: some questions

Why do you need a Funding Policy ?

How do you set an appropriate risk budget ?

Who makes what decisions on investment ?

What factors influence the approach to diversification ?

How do Investment Beliefs drive investment choices ?

What drives choice of external managers ?

*In short, you cannot have an investment strategy without the Governance foundations*

*Decisions on asset allocation are not optimal without structures put in place*

## ▶ **Process of setting the SAA within a SSI**

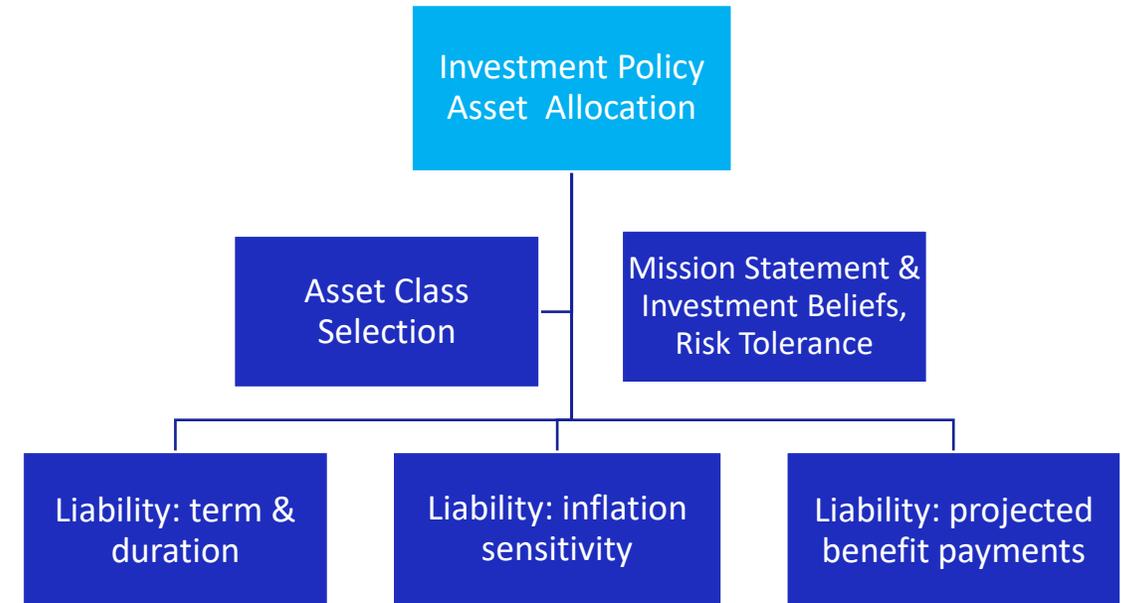
- 1. Mission, beliefs and (risk/return/other) objectives of the SSI defined and signed off**
- 2. Summary of constraints – liability profiles from the actuarial valuation and other restrictions**
- 3. Data collection on asset classes (risk and return plus other characteristics)**
- 4. Setting assumptions with approval from the SSI**
- 5. Collection and analysis of relevant international experience**
- 6. Analysis of different SAA options based on a standard risk & return methodology (eg Mean Variance Optimisation)**
- 7. Recommendations based on the above steps**
- 8. Implementation procedures including transition (depends on governance capacity)**
- 9. Ongoing measurement, review and re-assessment**

## ▶ Six trends in social security reserve fund investment

1. Liability driven investment, ALM and the impact of bond yield increases
2. Complexity of investment
3. The added value of Governance and its communication
4. Infrastructure investment
5. ESG
6. Increasing foreign investment

# Liability Driven Investment Approach for SSIs

- Longer time horizon implies more risk- seeking, non-bond assets such as equities and real assets
- Shorter time horizon implies less risk assets.
- Inflation sensitivity implies inflation-linked bonds, real estate, infrastructure, and equities.
- Cash flow needs imply more bonds and cash flow generating real assets.
- Risk tolerance and investment beliefs affect diversification and appropriate level of risk assets.



- Long term fund typically will have >30-40% risky assets
- Medium term funds typically will have 10-20% risky assets
- Short term funds will typically have <10% risky assets

Overall, 20% of BPJS funds in risky assets

## US 10 year Government Bond Yields – the story Part I

Year	10 year US Bond Yields
1981	15%
1991	8%
2001	5%
2011	3%
2021	1%

## Yields

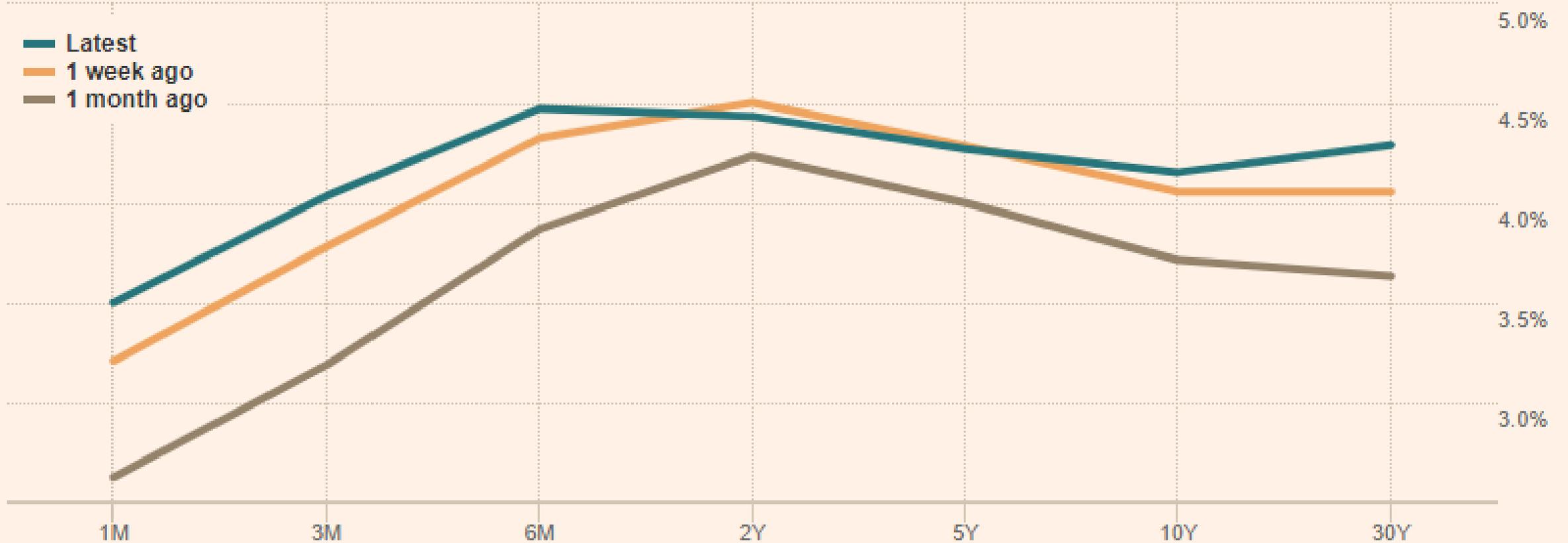
United States yield curve

United States

Chart

Table

- Latest
- 1 week ago
- 1 month ago



# A brief history of LDI

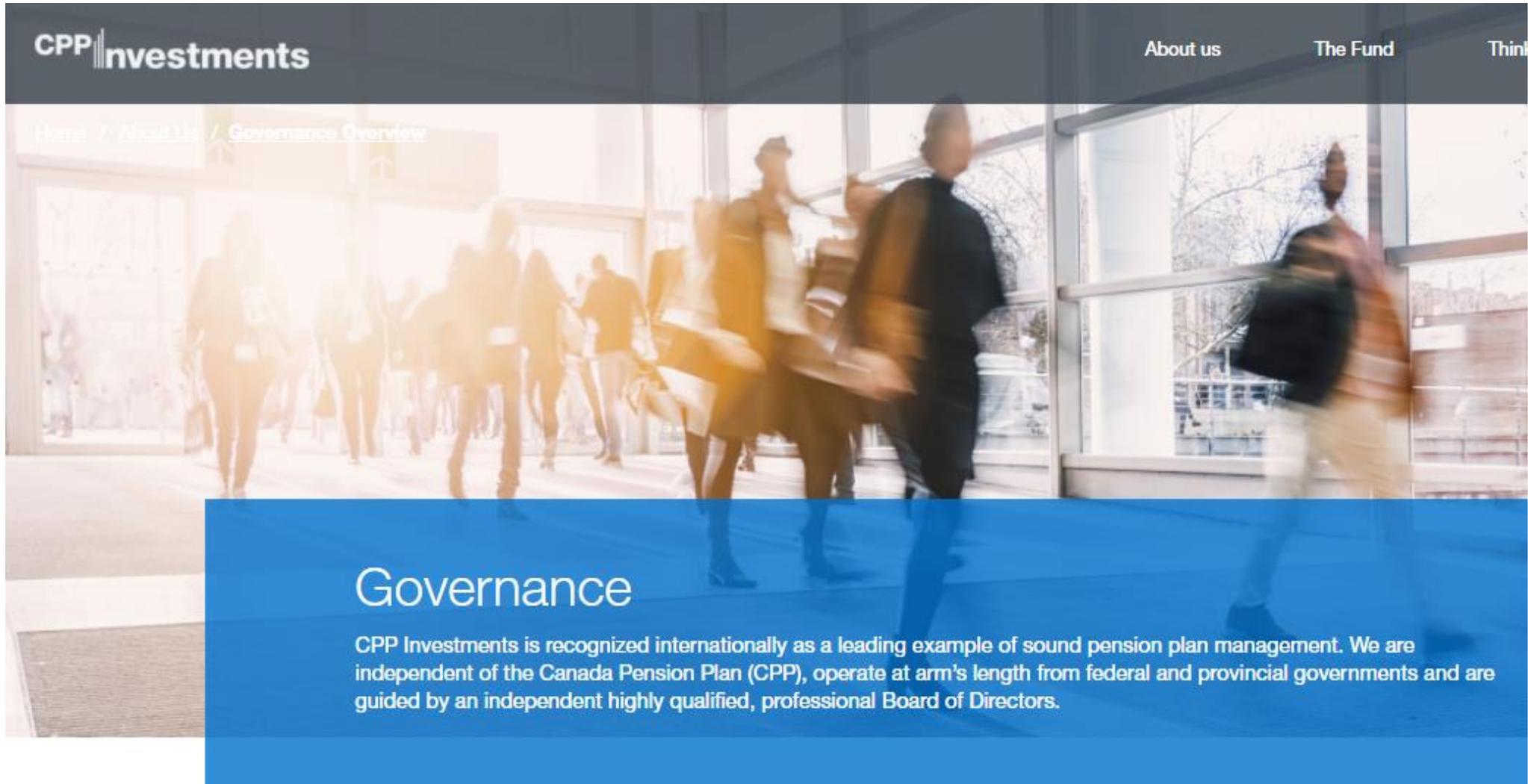
How an accounting tweak and a radical actuarial theory created a trillion pound asset class

## Complexity of investment



© Reuters

# The added value of Governance and its communication



CPP Investments

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## Governance

CPP Investments is recognized internationally as a leading example of sound pension plan management. We are independent of the Canada Pension Plan (CPP), operate at arm's length from federal and provincial governments and are guided by an independent highly qualified, professional Board of Directors.

# Infrastructure investment



## Environmental

- Related to climate change, pollution and bio diversity
- Eg avoiding coal miners; investing in renewable energy

## Social

- Supporting well being of workforce, communities and society
- Eg: avoiding use of child labour; investing in companies who support charities

## Governance

- Ethical and transparent management
- Eg: responsible pay, ownership etc

## ▶ ESG and PRI

The UN Principles for Responsible Investment were launched in 2006

Set out principles, evidence and plans for implementation

Most leading institutions and managers have signed up: nearly 200 in Asia .

There is an increasing supply of sustainable and climate investment funds. To be an ASEAN leader, ESG integration is essential

Consistent with national climate change plans

## ▶ Investing in domestic markets versus increasing foreign investment

### Domestic Markets

May know markets better

No currency risk

Lower costs

Broader investment aims / supply of capital

Reduction in risk ?

### Foreign Investment

Better risk and return profile

Diversification

Buying into emerging markets with different growth prospects

Asset classes that don't exist domestically

More efficient markets

Currency performance possible

Avoids distortion of local markets

## Where are other social security funds investing?

Asset Class	Japan	South Korea	Sweden	Switzerland	Thailand
Domestic Bonds	27%	42%	11%	19%	73%
Foreign Bonds	23%	6%	18%	41%	7%
Domestic Equity	24%	17%	14%	25%	13%
Foreign Equity	26%	22%	33%		4%
Private Equity		13%	24%		
Other				15%(real estate/metal)	4%

# ▶ RASU

What do we do and why ?

***The RASU partners with institutions to deliver actuarial services, provide technical advice and build up local capacities and resources***

## **Why ?**

- Increasing demand for actuarial and investment work -> **ILO uniquely positioned to do this**
- Supports evidenced based policy and financing decision making -> **strengthening social security**
- An effective way for social security institutions to influence policy, reform and financial debate -> **evidence based policy**
- Strengthens actuarial capacity, expertise and resources within institutions -> **leaving a legacy within social security institutions**

***Actuarial Valuations: strengthen sustainability and support adequacy***

**Thailand:** Workers Compensation Valuation 2020 lead to recommendations on improving scheme sustainability and data management

**Malaysia:** Actuarial valuation highlighted sustainability issues and recommended changes as well as costing reforms

**Viet Nam:** Review of actuarial valuation plus capacity building within institutions to carry out work in house

***Actuarial analysis and policy input : improves policymaking, reforms and coverage***

**Various countries:** analysis of impact of Covid, benefit reforms, costings and proposals

**Indonesia:** actuarial analysis input into scheme design and financing approach for new UI scheme

**Myanmar:** quantitative and qualitative assessment of shock responsiveness of social protection schemes

***Investment & financing: enhances governance, performance and monitoring***

**Thailand:** development of Strategic Asset Allocation recommendations for reserve funds and reinforcing investment governance

**Cambodia:** technical advice and training on investment governance, asset allocation and ALM

**Malaysia:** investment governance, ALM, reporting and training

***Building up local capacity and training: fosters knowledge transfer***

**China:** delivery of training, e-coaching and *train the trainers* courses to ensure legacy

**Thailand:** partnered with Mahidol to create ‘*Actuarial work in social security*’ course

**Cambodia:** training on data and investment issues

**Indonesia:** investment governance and ALM

**Malaysia:** business case for actuarial department

## Case Study: Actuarial valuation

► **First valuation - Good Governance, regulatory, ILO/IAA/ISSA requirements and for policy and financial decision making**

**But Data – raised more questions than answers at the start**

**We highlighted that claims data looked strange and what that meant plus other recommendations (improving reporting)**

**This will lead to better management and possibly improved benefit payment procedures**

**We also checked whether benefits met ILO Conventions – they didn't and we recommend improving and costed it**

**Other recommendations – eg experience rated contributions highlighted by international experience and costed**



**Using valuation results  
to influence policy**

## ▶ Financing and managing work

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The work of the Regional ASU is financed by constituents

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This allows for a close relationship between work undertaken and financing – important for legacy aspect

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The RASU includes input of other ILO specialists and uses its network of external experts

## ► Why the regional aspect of actuarial work is so important to social security institutions

We *partner* with institutions to deliver actuarial and investment work and *build up local expertise*

*Understanding & knowledge of the region:* working with ILO Country Offices and regional experts

*Continual relationship* means we are here for the long term

*RASU complements* other Social Protection work in the region

▶ **THANK YOU**

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