

ACTUARIES AND PENSIONS SUPERVISION: OVERVIEW OF PENSION PLANS

**TWIN PEAKS - INTRODUCTORY TRAINING COURSE
BANK OF JAMAICA
SEPTEMBER 29, 2025**

BRITTA HAY



AGENDA

INTRODUCTION

PURPOSE OF PENSION PLANS

TYPES OF PENSION PLANS

FUNDING AND FUND MANAGEMENT

DB PLAN “LIFE CYCLES”

RISK IN PENSION PLANS

OBJECTIVES OF THE SUPERVISOR

INTRODUCTION

What this presentation won't do:

- Drown you in graphs, charts and tables and statistics
- Exhaustively describe every type of pension arrangement
- Focus only on Jamaican pension plans
- Tell you how to do your job

What this presentation will do:

- Help you understand how and why pension plans work (or don't work)
- Explain why pension plans need actuaries and their advice
- Help you appreciate the balance between contributions paid in and benefits paid out

QUESTIONS?

A vertical strip on the left side of the slide shows a close-up of blue water with ripples and small white foam bubbles.

PURPOSE OF PENSION PLANS

Why would an employer set up a pension plan?

- Employee recruitment
- Workforce management
- Social protection
- Tax benefits
- Investment benefits

A vertical strip on the left side of the slide shows a close-up of blue water with gentle ripples and small white foam caps.

PURPOSE OF PENSION PLANS

Why would a government set up a public pension plan?

- Workforce management, on a national scale
- Social protection

A vertical strip on the left side of the slide shows a close-up of blue water with gentle ripples and small white foam caps.

TYPES OF PENSION PLANS

- Private/public
- Defined Benefit/Defined Contribution
- Contributory/non-contributory
- Funded/pay-as-you-go

A vertical strip on the left side of the slide shows a close-up of blue water with small, white-capped ripples. The rest of the slide has a plain white background.

TYPES OF PENSION PLANS

Some defined contribution plans avoid the costs and fees associated with buying annuities for their pensioners, and instead pay pension benefits out of the fund.

What is the risk in doing this?

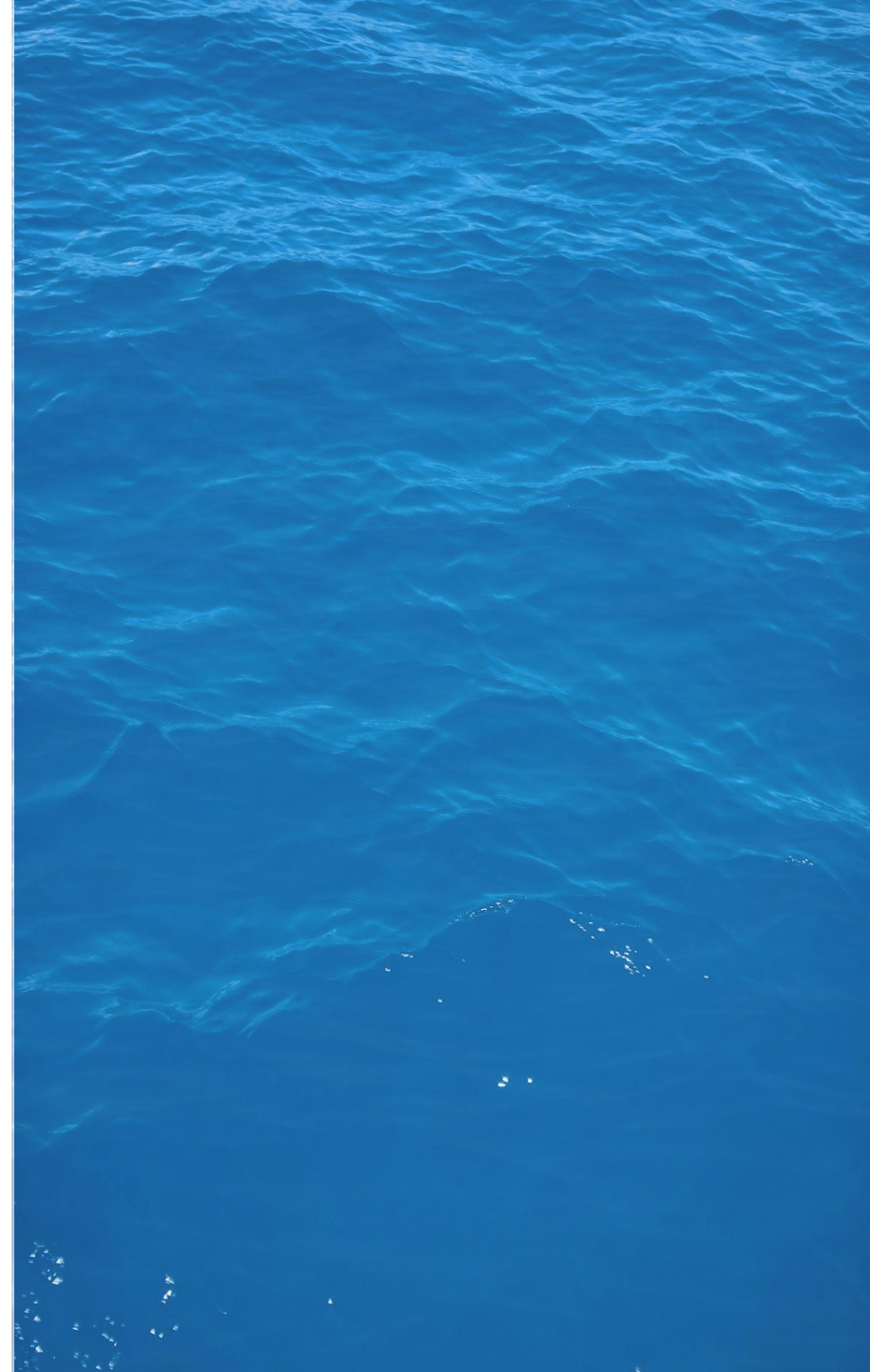
QUESTIONS?

PRE-ASSESSMENT QUESTION

3. Two members of an employer-sponsored defined contribution plan retire at the same age and on the same day. They contributed the same amounts into the fund and their accumulated contributions are equal. Which of the following statements about their pension payments is true?
- A. They will receive the same amount each month.
 - B. Their payments will differ if they are of different genders.
 - C. Their payments will differ if one has worked longer with that employer.
 - D. Their payments will differ, but only for a reason not listed above.

FUND MANAGEMENT

- Objectives (SIPP)
- Financial market constraints
- Regulatory constraints
- Risk/return
- Asset/liability management



A vertical strip on the left side of the slide shows a close-up of blue water with ripples and small white foam bubbles.

DEFINED BENEFIT PLAN “LIFE CYCLES”

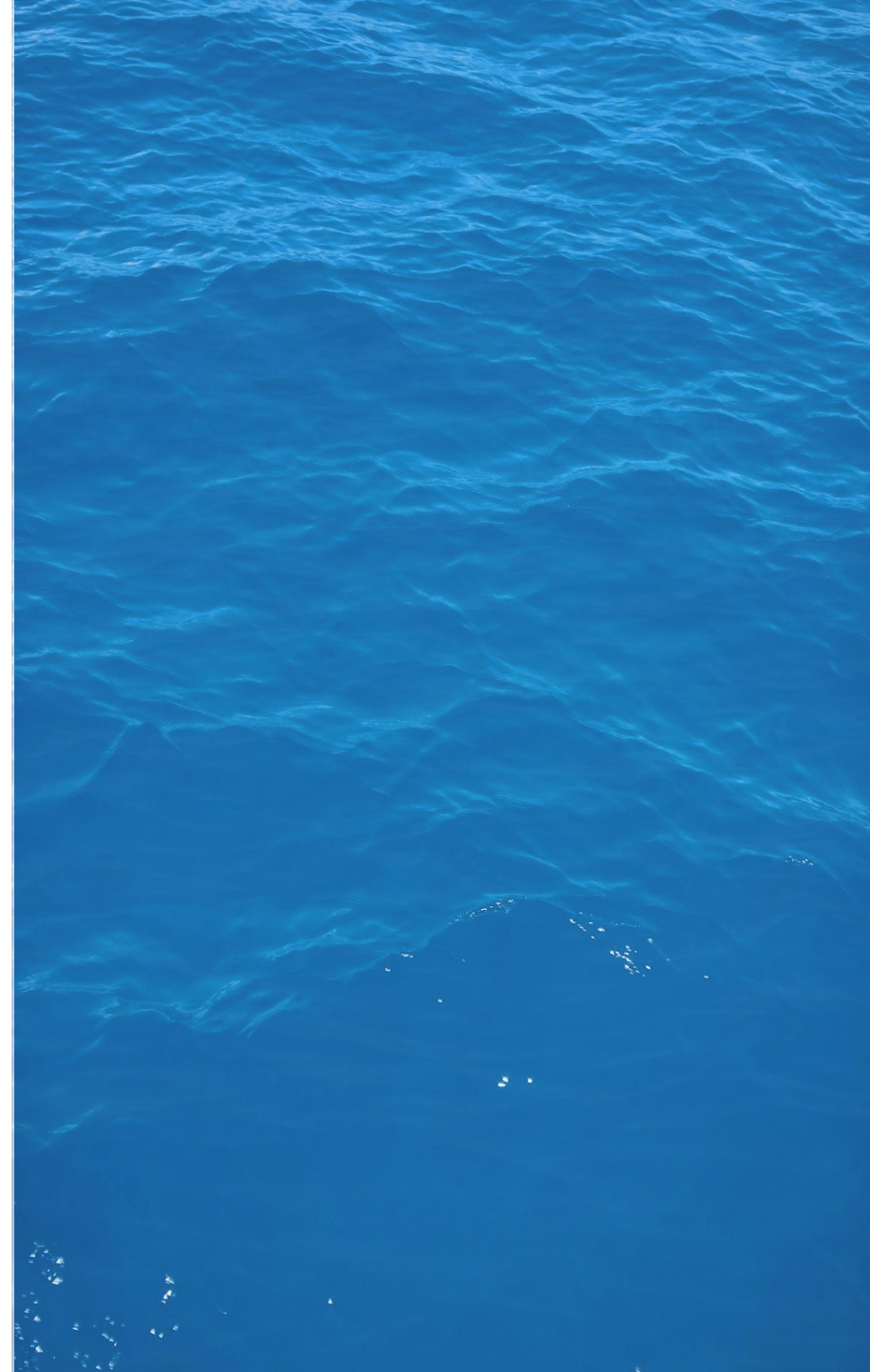
- Setting up a defined benefit plan
- Early phase – contributions in, few benefits paid out
- Stable phase – contributions in and benefits paid out
- Declining phase – benefit payments are greater than contributions in

PRE-ASSESSMENT QUESTION

7. Which of the following is true?
- A. Defined benefit plans provide more generous benefits than defined contribution plans.
 - B. Members are responsible for investing their voluntary contributions to the plan.
 - C. Defined contribution plans typically provide spouses' and children's pensions.
 - D. Members contribute a smaller percentage of their salary to defined contribution plans than to defined benefit plans.

RISK IN PENSION PLANS

- Demographic risks
- Investment risks
- Operational risks
- Law of large numbers (if the numbers are not large!)



RISK IN PENSION PLANS

All risks in a pension plan ultimately contribute to the same outcome – the fund is insufficient to pay the expected benefits.

Who bears that risk?

Understanding the differences in the dynamics of defined benefit and defined contribution plans is fundamental to the supervision of pension plans.



PRE-ASSESSMENT QUESTION

5. You are a member of a defined contribution pension plan and you intend to retire within two years. Which of the following will have the greatest impact on the amount of your pension payments?
- A. Forgetting to pay your contributions into the fund.
 - B. Changes to the benefit formula in the Trust Deed and Rules.
 - C. You will forfeit one year of pension benefits for each year by which you delay your retirement.
 - D. Investment losses in the fund close to your retirement date.

BACK FROM THE BRINK: 10 YEARS ON

These 401(k) funds took a beating in 2008 — and it could happen again

PUBLISHED FRI, SEP 14 2018•8:05 AM EDT | UPDATED FRI, SEP 14 2018•11:48 AM EDT



Darla Mercado, CFP®
@DARLA_MERCADO

SHARE



KEY POINTS

- Target-date funds whose investors were on the verge of retirement experienced losses exceeding 20 percent during the 2008 crisis.
- Market corrections happen, but investors must maintain a long-term focus and save consistently.

[Popular](#)[Latest](#)[Newsletters](#)*The Atlantic*[Sign In](#)**BUSINESS**

The Recession Hurt Americans' Retirement Accounts More Than Anybody Knew

Most people think IRAs and 401(k)s have pretty much recovered from deep losses in 2008. They haven't.

By Teresa Ghilarducci



PRE-ASSESSMENT QUESTION

10. Which of the following is true?

- A. Member statements are not necessary in defined benefit plans because the members already know from the Trust Deed and Rules what their benefits will be.
- B. Member statements are only necessary close to retirement.
- C. Member statements show projections of what members will receive at retirement.
- D. Member statements confirm what members will receive at retirement.

OBJECTIVES OF THE SUPERVISOR

You tell me!

- Ensuring that everyone has a safety net when they retire?
- Protecting the public from corporate greed?
- Playing the role of policemen? Or referees?
- Are the objectives different for different industries? (Insurance? Securities?)
- How important is it for the objectives to be the same?

QUESTIONS?

THANK YOU!