



# THE KEY TO A SUCCESSFUL EMPLOYMENT INJURY INSURANCE SYSTEM

ITCILO E-CAMPUS / ONLINE KNOWLEDGE

Module 8

Investment Policy



International Labour Organization



International Training Centre

# Overview

This module presents the central role of the investment policy in an employment injury insurance scheme. Considerations related to the elements of an investment policy, the relationship between the investment and the liability and risk/reward balance are presented in this chapter. The module also presents the role of a funding policy and the appropriate measures to monitor the performance of the investment policy.

## Learning Outcomes

By the end of Module 8, participants will:

- Acquire a basic understanding of the ISSA guidelines related to setting up an investment policy in an employment injury insurance scheme
- Acquire a basic understanding of the framework of setting up an investment policy, including different asset classes that can be selected and the linkage with the structure of the liability
- Acquire introductory knowledge of portfolio optimization, including the risk/reward analysis related to asset class selection
- Acquire a basic understanding of the role of a financing policy and its influence on the investment policy

# Legend

If you find this icon , you facing an **EXTERNAL** link

In order not to lose the current page, it can be useful to open a web page in a new tab. By default, the rule is that an external link (to another site) opens in a new tab, and an internal link (to another page on the site) opens in the same tab. But this is not always the case, and it is also sometimes useful to want to open several pages of the same site at the same time, in several tabs.

If you want to open a link in a new tab, **right click on the link and select “Open in new tab”**. You can also use the keyboard shortcut **“Ctrl”+left mouse click** on the link.

If you find one of these icons    , you facing an **INTERNAL** link



left mouse click on the icon (link) to see more information.



left mouse click on the icon (link) to return to the original slide.



left mouse click on the icon (link) to go to the next page.



if this icon is grey, you have reached the last page.



left mouse click on the icon (link) to return to the previous page.



if this icon is grey, you have reached the first page.

# Investment Policy

# Investment policy environment – ISSA guidelines

## ISSA Guideline No. 8 Investment Policy

- For social security institutions that have an investment mandate
  - legislation, policy or decree establishes the general direction of the investment policy, adherence to the prudent person principle, and aligns it with sustainability principles.
- The board and the management have the technical expertise to decide on the types of allowed investment instruments, the need for diversification to mitigate risks, and the merits and risks of an investment proposal, using security and profitability as the main basis for an investment undertaking.
- Legislation, policy or decree establishes the legal liability of the board, the management and their designated agents for fraudulent investments.
- ***Observation: setting investment policy requires both technical and qualitative considerations, as well as economic and social policy inputs.***

# Investment policy environment – ISSA guidelines

- **The prudent person principle is integral to the fiduciary duties of the board and the management** in administering and managing the funds of the institution.
  - The investment unit adheres to the prudent person principle in managing the funds of the institution.
- **The investment unit of the institution efficiently implements the investment policies** set out by the board and the management.
  - When the institution’s mission includes elements of socially responsible investing (SRI) and environmental, social and corporate governance (ESG), the board and the management take these into account in setting the investment policies.
- **The board and the management have the technical expertise** to determine whether investment proposals have undergone due diligence, and act upon their determination.
- **The management ensures that the valuation of the investment portfolio is in accordance with national and international professional standards.**

 [Click here for more details on investment concepts](#)

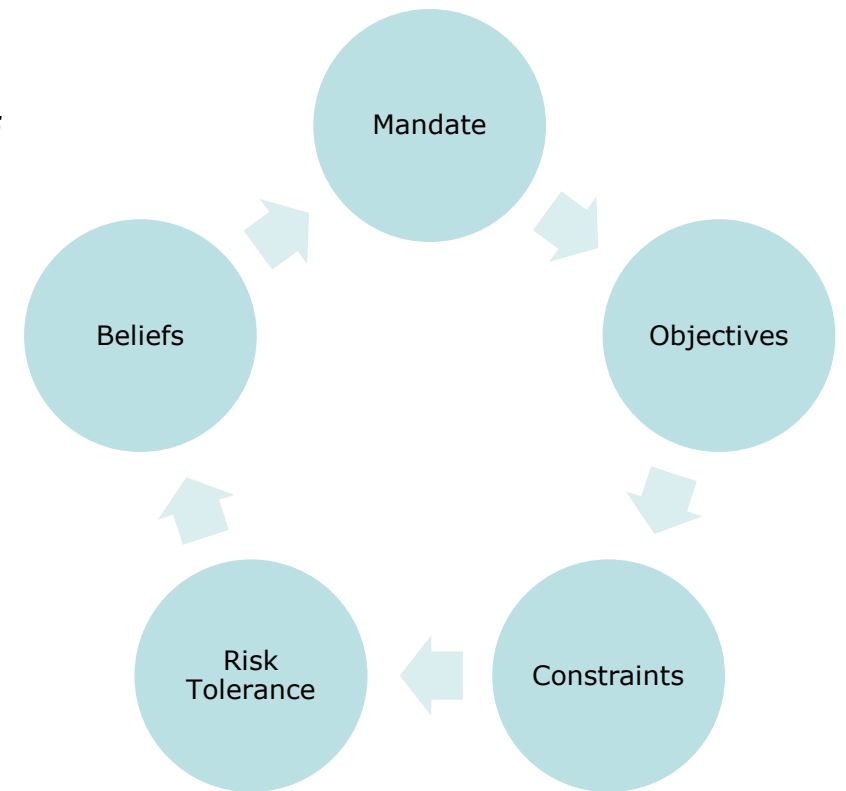
# Investment policy – background and purpose

- **Background**
  - The role of investments in any benefit program
  - What is an investment policy ? It's purpose, audience, and content ?
  - Fiduciaries and the prudent person rule or approach
- **The role of investment in an institutional financial ecosystem is seen in the basic equation:**
  - $\text{Contributions} + \text{Investment Income} = \text{Benefits} + \text{Expenses}$
- **The importance of investment policy:**
  - Investment policy defines what the fund assets can be invested in and in what proportion or percentage of total assets
  - Investment policy must be followed by anyone investing assets, fiduciaries and all stakeholders
  - Prudent person (s/b 'expert') must invest (develop a policy) in a manner that a 'prudent person familiar with such matters' would follow
  - Investment policy also defines stakeholders, roles and responsibilities, nature of program being funded, eligible asset classes, quality constraints, diversification, allocation targets and ranges, risk management, objectives, benchmarks and monitoring and other topics

# Investment policy framework

## Framework for creating policy includes

- **Nature of the mandate** – EIS provide a valuable financial and social benefit to a country's working population
- **Objectives** - Typically to earn a rate of return consistent with a prudently diversified portfolio AND to provide the requisite level of benefit security
- **Constraints** – Time horizon, risk tolerance, and investment beliefs are key constraints reflected in limitations on investments to achieve risk management, diversification and consistency of return as appropriate for the mandate (e.g. ineligible investments, maximums and minimums on asset classes, quality constraints, etc.)
- **Risk Tolerance** – Tolerance for volatility of returns, loss of capital, stability of cash flows, etc. all relate to the nature of the mandate, the source of funding, need for benefit security and ability to fund temporary or permanent loss of capital
- **Beliefs & Non-Financial Objectives and Constraints** – Invest only within national borders; should be evaluated against impact on financial objectives





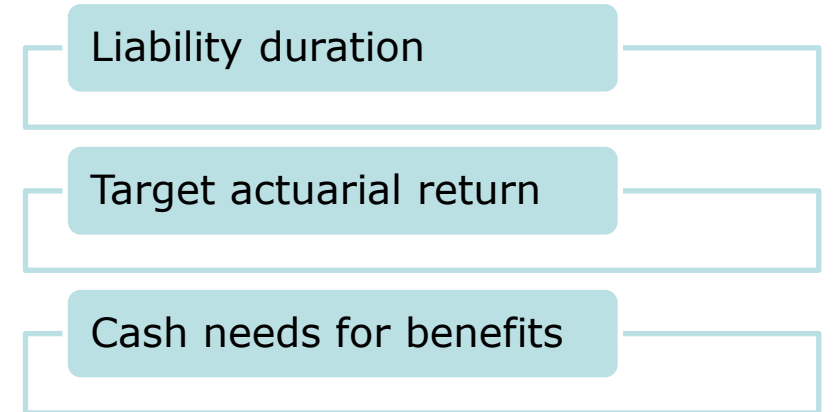
# Investment policy – liability structure and liquidity needs

**EIS include both short term (medical and sickness) and longer term (disability) benefits**

- The investment policy should be structured to adequately provide for both

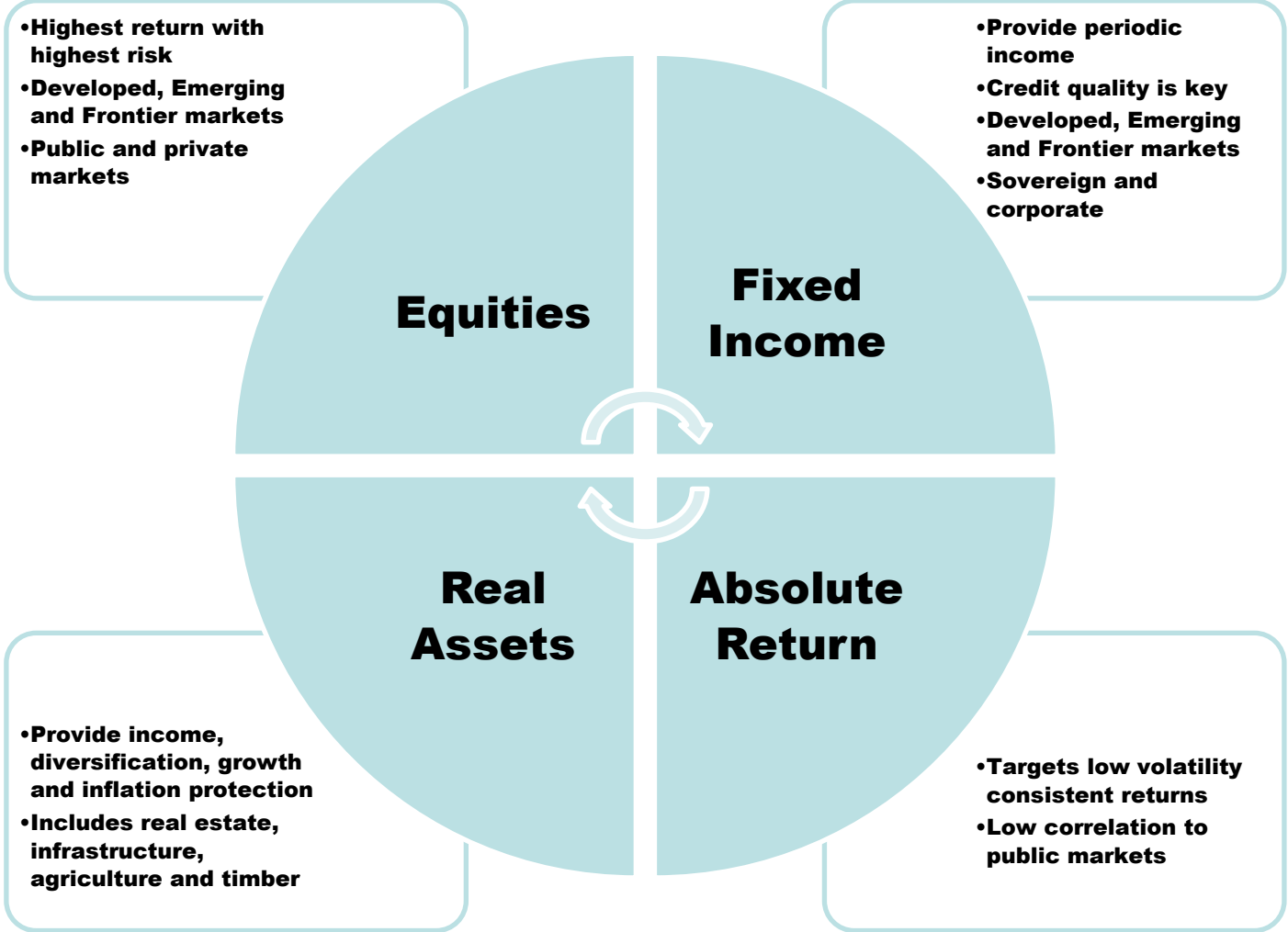
**The importance of liability structure and projected cash outflows**

- The term or duration of liabilities defines ‘time horizon’, one of the key constraints of any investment policy
- Time horizon will limit how much ‘volatility’ (risk as measured by standard deviation of portfolio returns) the policy should target
- Liabilities will also impact the minimum target expected return required to keep the program solvent-hopefully determined on a conservative basis reflecting investment grade bond yields
- The liability structure will also define cash outflows for program benefits which, in turn, must be reflected in the income expected from investments and the reliability of that income



# Investment policy – Key asset class building blocks

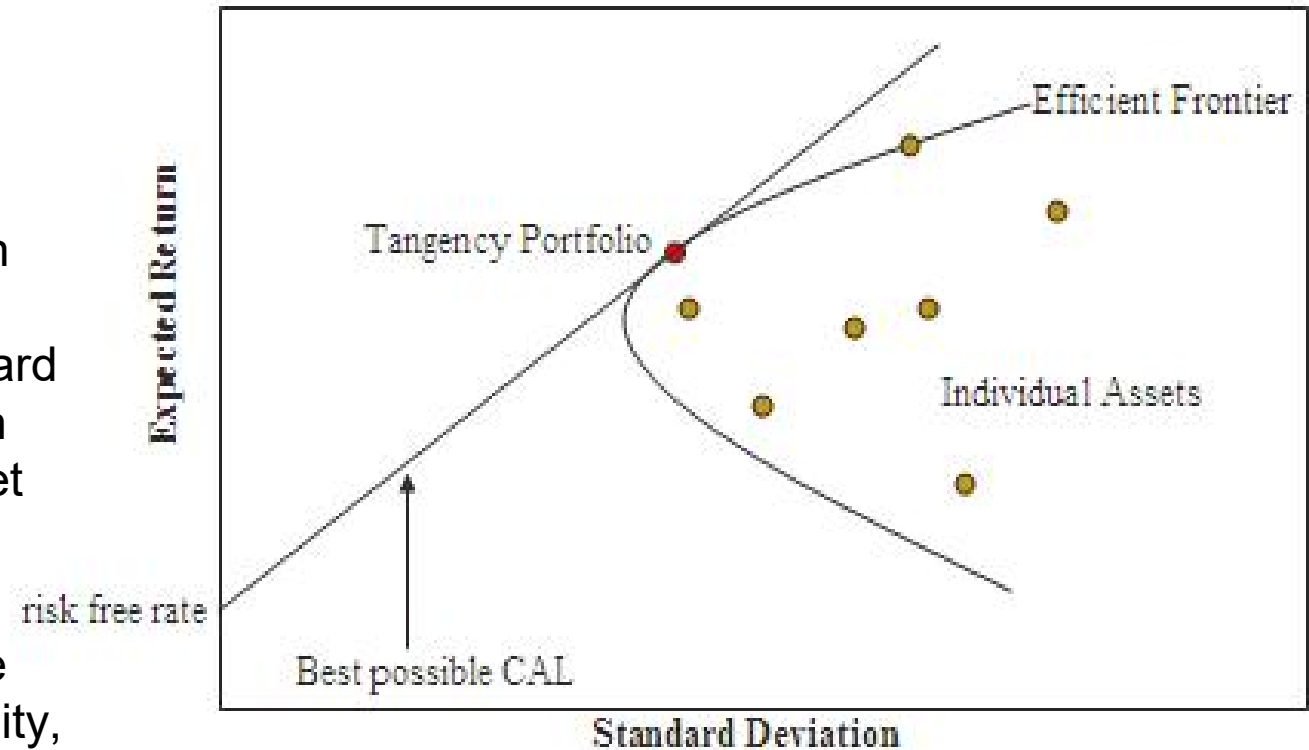
Key asset class building blocks reflect the unique portfolio impact of each



# Investment policy – Portfolio optimization

## Modern Portfolio Theory (MPT)

- Each asset class can be defined by an expected return, volatility of return and correlation to other individual asset classes
- Mean variance optimization states that a portfolio of asset classes can be optimized in terms of the combinations that produce the highest return for a given level of risk (standard deviation) of the portfolio, the latter based on individual asset class volatility and inter-asset correlations.
- It is important to note that constraints on minimum or maximum allocations to any one asset class, for any variety of reasons (liquidity, fees, cash flow, tail-risk, etc.) are equally important inputs to portfolio construction

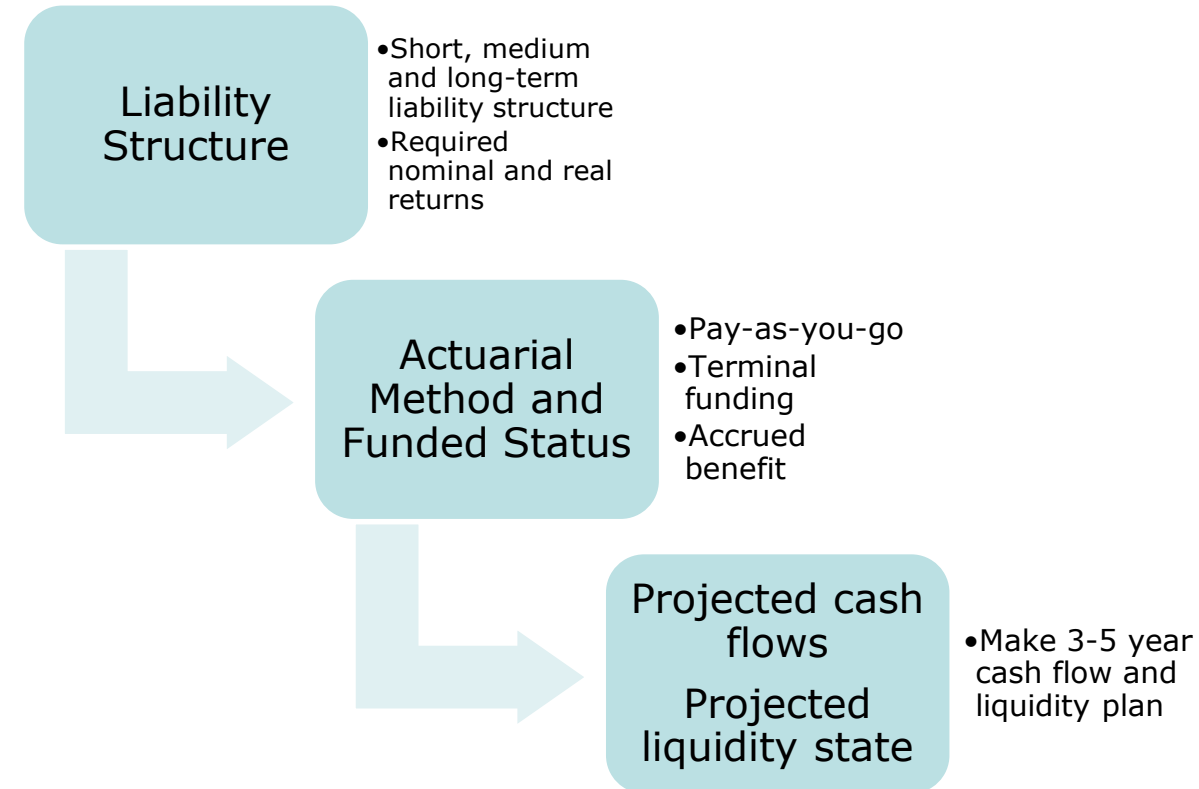


[This Photo](#) by Unknown Author is licensed under [CC BY-SA](#)

# Practical steps in setting effective EIS investment policy - Program actuarial liabilities and funding environment

Steps should include, with respect to program liabilities:

- **Determine proportion of short (ST <5 yrs.), medium (MT 5-10 yrs.) and long-term (LT >10 yrs.) actuarial liabilities**
  - Extremely important for asset class selection and benefit security
  - Projected 'liquidity state': need to be 'liquidity positive', not necessarily cash-flow matched
  - What are the required rates of nominal and real (over inflation) returns per the actuarial valuation assumptions?
- **How does 'actuarial funding method' recognize costs and liabilities ?**
  - Is it full, pay-as-you-go for shorter term and full liability 'terminal funding' or 'accrued benefit' funding for LT liabilities
  - What is current funding level ? Is there a deficit or surplus relative to liabilities



- **What are projected cash flows (contributions + investment income and maturities-benefits) for next 3-5 years before liquidation of assets ?**

# Practical steps in setting effective EIS investment policy - Review investment universe

## National Bond Market

- Determine the structure of the national bond market as bonds will typically play a major role in policy, based on their yields and government guarantees
- What is the term structure and yield curve positioning ? How do yields compare to actual and projected inflation ?
- What is the nature and structure of the treasury bill and bank deposit markets ?

## Equity Markets and Real Assets

- What is the structure of the country's equity market ? Equities may be appropriate to fund a portion of long-term liabilities, particularly if there are no longer term bonds, and the market is efficient and transparent
  - What is the number of listed companies, industry breakdown, market liquidity characteristics, etc.
- What is the nature of potential real estate and infrastructure investments, which may be appropriate for long-term liabilities ?

## Foreign Investments and Currency

- Are foreign investments permitted ?
  - Allocating a portion of assets to foreign bonds and stocks provides diversification and exposure to currencies that may, in itself, provide incremental return, depending on expectations for the local currency

# Practical steps in setting effective EIS investment policy - Foreign investments and currency exposure

**Foreign investment in publicly traded financial assets, equity and fixed income provides important potential advantages:**

- Foreign investment greatly expands the investment opportunity set and universe-there are over 40,000 publicly-traded companies valued at approximately \$80 trillion USD
- Foreign investment provides important diversification benefits due to the lack of correlation among various equity markets
- Foreign investments can be accessed easily and economically through index funds and ETFs, which are very liquid typically
- Foreign investments provide exposure to the USD, Euro, Yen and other currencies, providing both additional diversification, as well as a source of potential return from exchange rate movements, particularly for countries with a history or an expectation of currency depreciation

Larger  
Investment  
Universe

Diversification

Simple,  
economical,  
liquid

Currency  
return  
potential



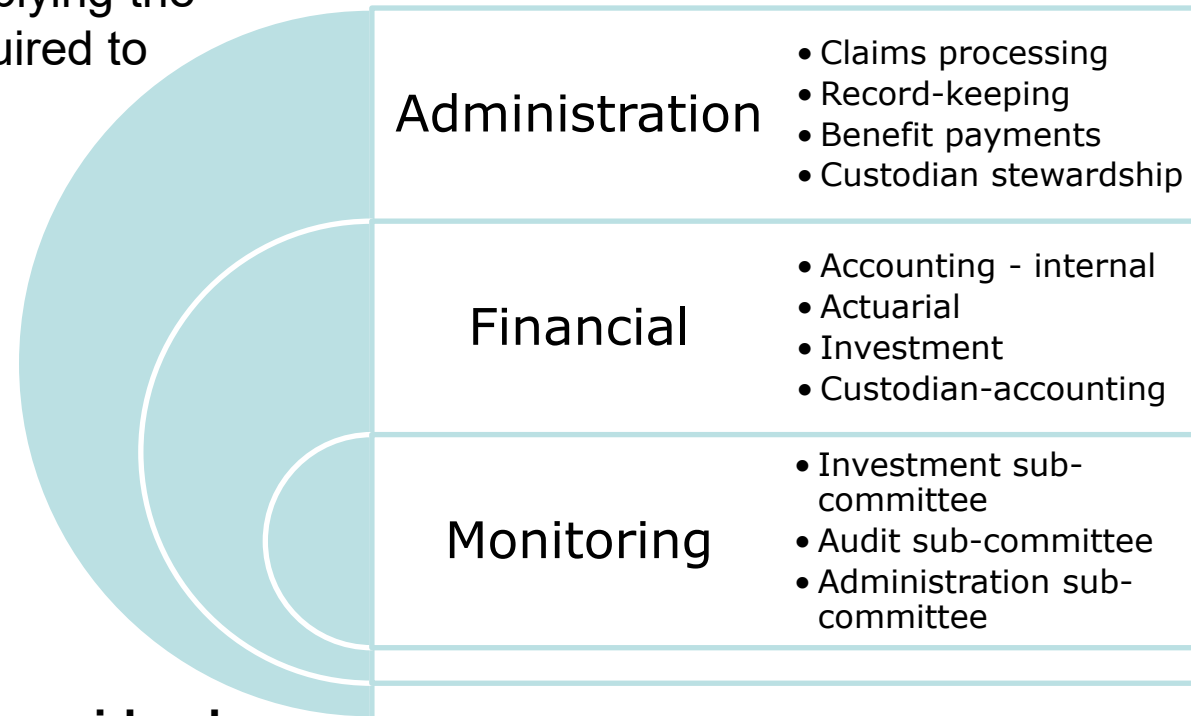
[Click here for a global financial markets overview](#)



[Click here for an example on building an investment portfolio](#)

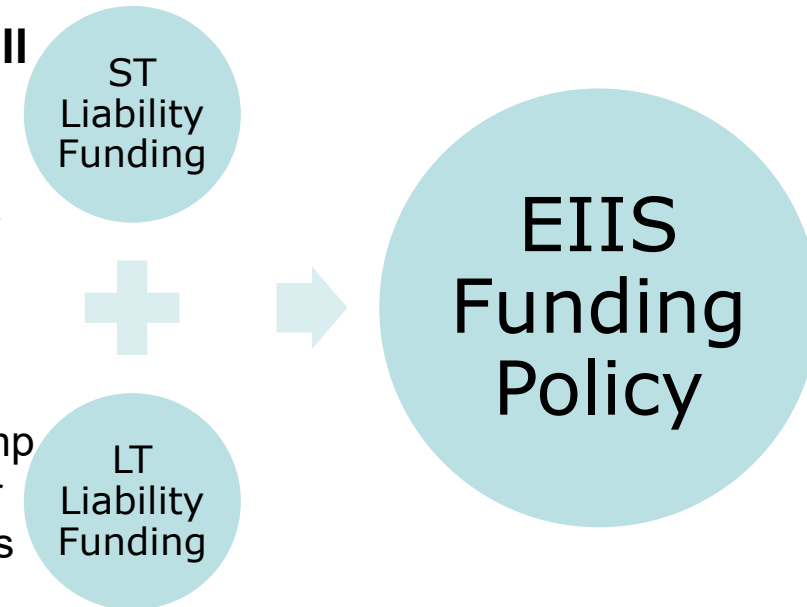
# Investment policy – Implementation and monitoring

- **Implementation refers to the actions taken, by qualified individuals or entities ('prudent person'), to effect and successfully apply the policies and perform the functions required to meet the EIS objectives**
- In addition to qualified Board and Management applying the requisite principals and standards, entities are required to perform the following functions among others:
  - Claims review and approval
  - Record-keeping and administration
  - Benefit payments
  - Custodian and accounting
  - Auditor-internal and external
  - Investment or fund manager
  - Investment sub-committee
  - Audit sub-committee
  - Administration sub-committee
- **While some 'governance players' and 'service providers' are necessarily external to the EIS, they may be internal, as well, if the requisite skill and experience exist.**



# Funding policy

- Funding policy refers to the timing of contributions, and the amount thereof, relative to both current period benefit payments and actuarial liabilities, and the methodology and reference metrics for each.
- **As benefit payments and actuarial liabilities reflect both ‘Short-Term’ and ‘Long-Term’ liabilities, the funding policy for the overall EIS may be a construct of the policy adopted for each of these components.**
  - Short-term benefits include medical and rehabilitation, temporary disability benefits and funeral expenses. These are usually financed by pay-as-you-go or annual assessment....the short-term benefit funding policy
  - Long-term benefits include permanent disability and survivor benefits, typically provided in the form of lifetime benefits, though sometimes as lump sums. These are usually funded using the ‘terminal funding’ method under which the full liability for ‘claims’ is reflected in funding costs. A key issue is whether ‘claims’ include only actual reported claims or an additional provision for ‘incurred but unreported’.
- The investable funds are the amounts contributed for long-term liabilities. Assets not required for current period payments should be appropriately invested (see earlier comments on Investment Policy for liability segments)





# Additional resources

## Additional readings

-  [Guidelines for the Investment of Social Security Funds](#)
-  [Governance and Investment of Public Pension Reserve Funds in Selected OECD Countries](#)



# THE KEY TO A SUCCESSFUL EMPLOYMENT INJURY INSURANCE SYSTEM

ITCILO E-CAMPUS / ONLINE KNOWLEDGE

Pop Ups - Module 8



International Labour Organization



International Training Centre

# Investment policy – Concepts

## Background

- The role of investments in any benefit program
- What is an investment policy ? It's purpose, audience, and content ?
- Fiduciaries and the prudent person rule or approach

## Framework for creating policy

- Nature of the mandate, objectives, constraints, risk tolerance/benefit security
- What are 'financial' vs. 'national' investment objectives ?
- The importance of liability structure and cash flows
- Short vs. long-term liabilities, positive vs. negative cash flow
- Impact of funding ratio and surplus

# Investment policy – Concepts

## **Key asset class building blocks and expected portfolio impact**

- Modern portfolio theory and the universe of asset classes
- Sample investment portfolios
- Currency and diversification globally vs. local national investments

## **Public vs. private schemes**

- Impact of partial pay-as-you-go on investment policy and risk tolerance

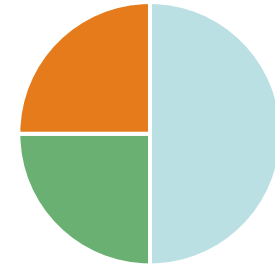


# Practical steps in setting effective EIS investment policy

## Sample Case Study

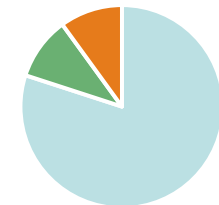
Case 1:

- Assume cash flow (liquidity) positive and liabilities are fully funded;
- Objectives are target return of 7% and expected inflation is 5%, benefit security is very important and risk tolerance is low**
- Key first step is to segment liabilities by time horizon, one of the most important policy considerations, and select appropriate assets:**
  - Short-term (<5 yrs.) liabilities are 50% of total: Policy allocation could be 100% bonds for income and security; 15% could be foreign bonds
  - Mid-term (5-10 yrs.) liabilities are 25% of total: Policy allocation could be 70% bonds with 15% in each of equities and real estate; 15% could be foreign equities or bonds
  - Long-term (>10 years) liabilities are 25% of total: Policy allocation could be 50% bonds with 25% in each of equities and real estate; 15% could be foreign equities or bonds
- Based on above allocations for each segment of the liabilities duration, the overall policy allocation is: Bonds: 80% (15% foreign), Equities: 10% (15% foreign) and Real Estate: 10% (15% foreign)**



- Short-term liabilities
- Mid-term liabilities
- Long-term liabilities

Policy Asset Allocation



- Bonds
- Equities
- Real Estate



# Practical steps in setting effective EIS investment policy



## Sample Asset Class Portfolio Assumptions

The rationale for the preceding observations on appropriate allocations for each liabilities' duration segment is based on typical expected return, risk (standard deviation) and correlations of each asset class and how appropriate each is, in combination with other asset classes, or alone, given the return, security and liquidity objectives of the program.

Asset Class	Expected Return / Standard Deviation	Domestic Equity Correlations	Domestic Bond Correlations	Domestic Real Estate Correlations	Foreign Equity Correlations	Foreign Bond Correlations
Domestic Equity (Em. Mkt.)	8% / 25%	1	0.5	0.4	0.7	0.3
Domestic Bond (Em. Mkt.)	7% / 12%	0.5	1	0.5	0.2	0.6
Domestic Real Estate (Em. Mkt.)	7% / 12%	0.4	0.5	1	0.2	0.1
Foreign Equity (Dev. Mkt.)	8% / 18%	0.7	0.2	0.2	1	0.5
Foreign Bond (Dev. Mkt.)	4% / 8%	0.3	0.6	0.1	0.5	1



# Practical steps in setting effective EIS investment policy



Policy Allocation X/Y/Z %	Expected Return	Standard Deviation <sup>1</sup>	One Standard Deviation <sup>2</sup>	Two Standard Deviation <sup>3</sup>
Domestic Equity (E) 100%	8.00	25.0	-17%	-42%
Domestic Bond (B) 100%	7.00	12.0	-5%	-17%
Real Estate (RE) 100%	7.00	12.0	-5%	-17%
Foreign Equity (FE) 100%	8.00	18.0	-10%	-28%
Foreign Bond (FB) 100%	4.00	8.0	-4%	-12%
E/B 50/50 (0.9SD)	7.50	16.7	-9.2%	-25.9%
E/B/RE 40/50/10 (0.85SD)	7.40	14.6	-7.2%	-21.8%
E/B/RE 10/80/10 (0.85SD)	7.10	12.2	-5.1%	-17.3%
E/B/RE/FE/FB 8.5/68/10/1.5/12 (0.8SD)	6.74	11.4	-5.75%	-17.25%
B/R 80/20 (0.9SD)	7.00	10.8	-3.8%	-14.6%
E/B/RE/FE 1.5/80/10/8.5 (0.8SD)	7.10	10.1	-3%	-13.1%

<sup>1</sup> Excludes tail risk volatility

<sup>2</sup> Downside return that has a 16% probability of occurrence

<sup>3</sup> Downside return that has a 2.5% probability of occurrence