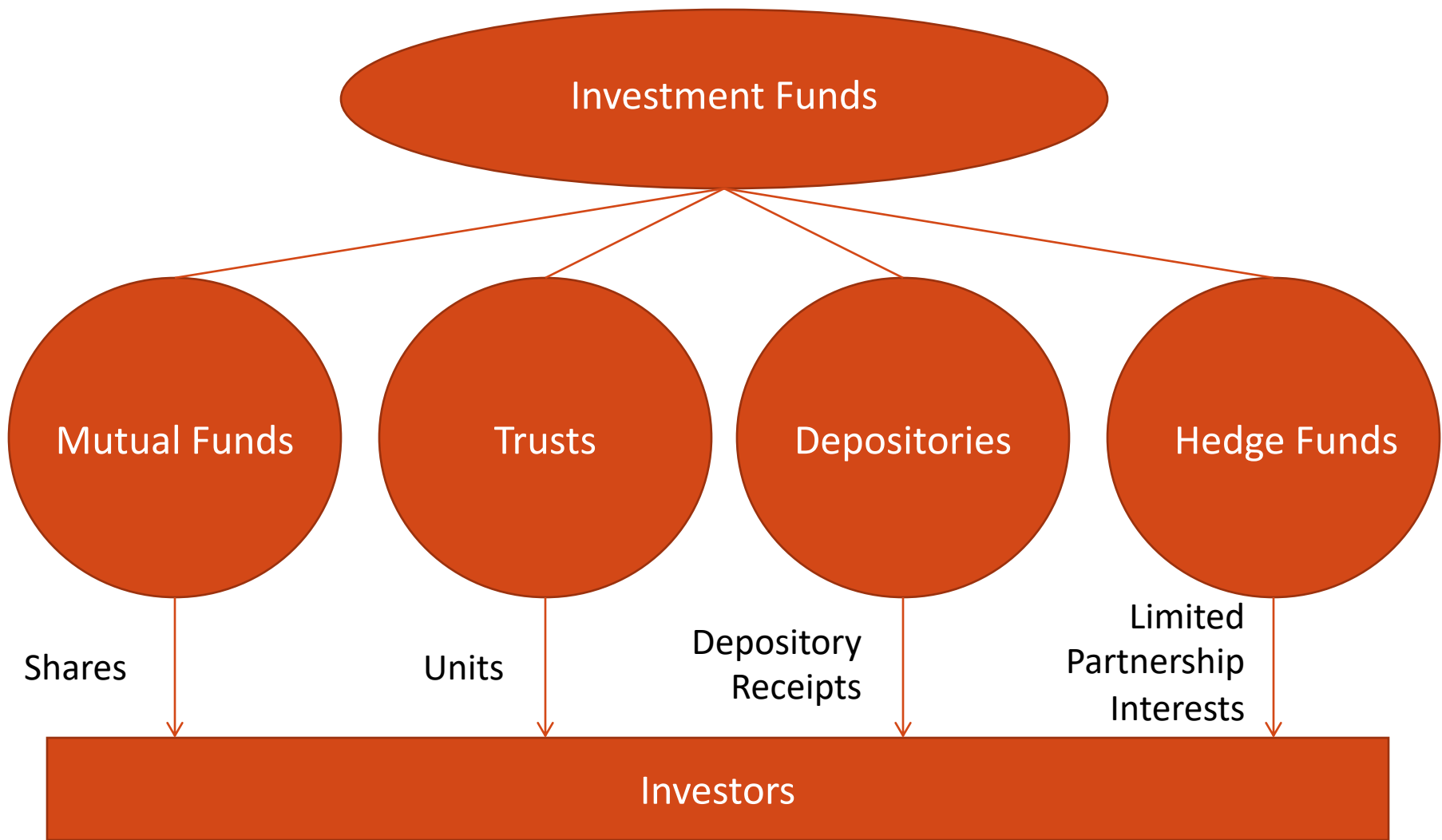


# 2

## POOLED INVESTMENTS

## 2.1 INVESTMENT FUNDS



# INVESTMENTS FUNDS

An investment fund is a set of assets belonging to several investors, intended for investment in securities and managed by professionals (managing companies).

- Fund's investors are commonly called **fund participants**.
- The net worth of a fund may be invested in various assets, e.g. stocks and bonds, so as to constitute a diverse set of securities or other financial assets – **mutual funds**.
- There are also funds whose investment strategy is mainly to invest in real estate assets – **real estate funds**.
- The set of assets fund managers invest is called the fund **portfolio**. Fund managers are obliged to give investors information about the portfolio exact composition, at least, on a monthly basis.
- Fund managers are also the ones responsible to compute the **value of fund units**.

## Types of Funds - # of units

- **Open-end funds**, in which investors can subscribe and redeem the units at any time, so the number of fund units under circulation varies;
- **Closed-end funds**, where the number of units is fixed, investors make their subscriptions within a specified time period and their redemption or repayment, as a rule, occurs only at fund's liquidation, in a predefined date.
- **Mixed funds**, differ by the fact that a part of the fund's value is divided by the fixed number of units and the rest by a variable number.

## Types of Funds - Returns

- The returns generated by the funds may be periodic, partially or totally distributed to investors. In this case, they are called **distribution of funds**.  
Whenever a fund distributes returns, the value of its units is reduced. It is usual to give investors the possibility to choose to receive the return or to reinvest it subscribing more fund units.
- The funds that do not distribute returns and automatically including all income into the fund's capital, are called "**capitalization funds**" or "**cumulative funds**".  
All returns are thus embedded in the fund unit value so investors will only receive them at redemption time.

## Types of Funds - investments

### ➤ Treasury funds

Characterized by the predominance of investment in short-term and extremely liquid products (such as T-bills, etc.).

### ➤ Money market funds

These funds are similar to Treasury funds, but should have a greater percentage of their assets invested in short-term applications with high liquidity and in bank deposits.

### ➤ Bond funds

Are the funds whose assets are composed mostly by Bonds.

These funds have increased risk in comparison to the previous funds, on the other hand, offer greater profitability. The most relevant risk of this category of funds is the credit risk of the bonds they invest in.

Bond funds can also be divided into:

✓ **Fixed-rate bond funds**

Are funds that invest primarily in fixed coupon bonds.

These funds are more exposed to interest rate risk. If interest rates increase, the value of bonds held by the Fund will tend to decrease. As a result, the value of units will also decrease, and there is a risk of capital loss.

✓ **Floating-rate bond funds**

Are funds that invest primarily in bonds with floating coupons. Despite also being subject to interest rate risk, they are much less exposed than fixed-rate bonds (if the floating rate is a reference interest rate). If interest rates increase both coupon and discount factors increase, somehow (at least partially) compensating one another. As they are less risky they also tend to have lower expected return.

➤ **Equity funds**

Are the funds investing primarily in stocks. These funds have greater risk, as the value of fund units strongly depend on the price changes in the stocks they invest in. Of course some stocks and equity markets are riskier than others.



➤ **Mixed Funds**

Are funds that combine characteristics of bond funds and equity funds. The risk and profitability associated with these funds varies as a function of greater or lesser weight that the stocks and bonds have in the fund's assets.

Also its risk depends on the particular assets themselves (issuers, countries, etc.)

➤ **Funds of funds**

Are the funds that invest primarily in units of other funds. The risk and return profile depends strongly on the funds they choose to invest in.

➤ **Index funds**

Are equity and/or bond funds whose investment policy is to replicate all or part of a given stock or bond index. They are called passive funds as the task of managers is reduced to the replication of the index. As a rule, these funds have lower management fees than equity or bond funds.

## ➤ **Guaranteed Funds**

Are funds that have embedded special capital guarantees and/or a particular return profile.

Popular guarantee mechanisms are:

- ❖ Guarantees provided by a third party, although the management of the Fund is to be conducted autonomously to the possible need for its actuation;
- ❖ Use of financial instruments suitable for that purpose, usually derivative products.

## ➤ **Free Funds**

Are funds that do not assume any commitment regarding the composition of their investment.

All advertising or information concerning these funds should include a mention about the degree of flexibility allowed when investing.

## ➤ Hedge funds

The risks to which the investment funds are exposed to can be reduced or increased by the use of derivative financial instruments.

### ❖ Hedging

Derivatives can be used to cover some of the risk exposure of the fund portfolio – thus the name “hedge”.

### ❖ Leverage

But they can also be used to increase risk exposure by using derivatives to leverage the underlying risk . Portfolios of hedge funds are perceived as more sophisticated and riskier than those of common mutual funds.

## Costs

- **Subscription/entry fee (Front-end load)** – if it exists, is collected by the holding company at the time the investor underwrites units. The amount is added to the value of the participation units.
- **Redemption/exit fee (close-end load)** – If it exists, is collected by the holding company at the time investor receives the redemption value of units. The amount is subtracted from the value of the units.  
This fee usually is inversely related to the time of investment.
- **Management fees** – They are withdrawn directly from the fund value (on a yearly basis) and their aim is to pay the services provided by the holding company. The unit value of participation already incorporates this cost.



**OBS:** All these costs make funds adequate mostly for *buy and hold* type investors.

## ETFs

- An **exchange-traded fund (ETF)** is an investment fund traded on stock exchanges, much like stocks.
- Combine the advantages of diversification, characteristic of investment funds, with the ease of trading of stocks. Are more suitable to investors who have a profile more "active" with regard to their investments.
- Most ETFs replicate the evolution of a given index (passive management as in index funds). More recently, some active management ETFs have also been authorized, but imply total transparency in the portfolio composition and form of management.
- Nowadays, there are also so-called "leveraged ETFs" or "inverse ETFs", which use derivatives so that its performance corresponds to a multiple, or varies in the opposite direction of the daily performance of the given index.

## 2.2

# THE PROCESS OF PORTFOLIO MANAGEMENT

# STEP ONE: PLANNING

- ✓ A person cannot be an effective portfolio manager without a **solid grounding in the basic principles of finance**
- ✓ The **two key concepts** in finance are:
  - 1) A dollar today is worth more than a dollar tomorrow
  - 2) A safe dollar is worth more than a risky dollar



These two ideas form the basis for all aspects of financial management

- ✓ Other important concepts/ideas:
  - ❖ The economic concept of **utility**
  - ❖ There is a distinction between “good companies” and “good investments”
    - The stock of a well-managed company may be too expensive
    - The stock of a poorly-run company can be a great investment if it is cheap enough



# THE INVESTOR AND THE IPS

- ✓ Begins with a **Investment Policy Statement**, which outlines:
  - ❖ Return requirements
  - ❖ Investor's **risk tolerance**
  - ❖ **Constraints** under which the portfolio must operate

## Investors Constraints

- ✓ Constraints are the kind of financial circumstances imposed on an investor's choice.
- ✓ Five common types of constraints are:
  1. **Liquidity**: refers to how easy an asset can be converted to cash
  2. **Investment horizon**: is the planned liquidation duration of investment.
  3. **Regulations**: Professional and institutional investors are constrained by regulations- investors who manage other people's money have fiduciary responsibility to restrict investment to assets that would have been approved by a prudent investor.
  4. **Tax considerations**: special considerations related to tax position of the investor. The performance of any investment strategy are always measured by its rate of return after tax.
  5. **Unique needs**: often centre around the investor's stage in the life cycle such as retirement, housing and children's education.

# STEP TWO: CONSTRUCTION / EXECUTION

- ✓ **Formulate an investment strategy** based on the investment policy statement
- ✓ Portfolio managers must understand the basic elements of capital market theory
  - ❖ Informed diversification
  - ❖ Naïve diversification
  - ❖ *Beta*

## ✓ Setting objectives

- ❖ It is difficult to accomplish your objectives until you know what they are
- ❖ Terms like **growth** or **income** may mean different things to different people

## ✓ Investment policy

- ❖ The separation of investment **policy** from investment **management** is a fundamental tenet of institutional money management
  - Board of directors or investment policy committee establish policy
  - Investment manager implements policy

✓ **International investment**

- ❖ Emerging markets carry special risk
- ❖ Emerging markets may not be informational efficient

✓ **Stock categories and security analysis**

- ❖ Preferred stock
- ❖ Blue chips, defensive stocks, cyclical stocks, ...

✓ **Security screening**

- ❖ A **screen** is a logical protocol to reduce the total to a workable number for closer investigation

## ✓ Debt securities

- ❖ Pricing
- ❖ Duration + Convexity + Credit modeling
  - Enables the portfolio manager to alter the risk of the fixed-income portfolio component
- ❖ Bond diversification

## ✓ Pension funds

- ❖ Significant holdings in gold and timberland (*real assets*)
- ❖ In many respects, timberland is an ideal investment for long-term investors with no liquidity problems

## Risk

VS

## Safety

### 1) Stocks

- a) Company risk
- b) Market risk
- c) Macro risk
- d) Historic 11.1% return

### 2) Mutual Funds

- a) Diminished company risk
- b) Still has market & macro risk
- c) Could return 8-10%

### 3) Variable Annuities

- a) Uses sub-accounts
- b) Can be more expensive
- c) Returns of 6-9%

### 4) Long-Term Bonds

- a) Subject to interest rate risk

### 1) CD's

- a) Temporary parking spot 4 - 5%
- b) After tax and inflation, results in minimal returns

### 2) Short Term – Medium Term Government Bonds

### 3) Fixed Annuities

- a) Tax-deferred
- b) Earnings add up
- c) Higher interest rates paid

### 4) Equity Indexed Annuities 5 – 8

- a) Over Time - No Market Risk
- b) Links to major indexes  
Usually S&P 500
- c) With “No Risk of Loss” of Principal due to market decline

# STEP THREE: MANAGEMENT / FEEDBACK

✓ Subsequent to portfolio construction:

- ❖ **Conditions change**
- ❖ Portfolios need **maintenance**



## Passive vs. Active Management

✓ **Passive management** has the following characteristics:

- ❖ Follow a predetermined investment strategy that is invariant to market conditions or
- ❖ Do nothing
- ❖ Let the chips fall where they may

✓ **Active management**

- ❖ Requires the periodic changing of the portfolio components as the manager's outlook for the market changes

## Performance Evaluation

- ✓ **“Did the portfolio manager do what he or she was hired to do?”**
  - ❖ Someone needs to verify that the firm followed directions
- ✓ Interpreting the **numbers**
  - ❖ How much did the portfolio earn?
  - ❖ How much risk did the portfolio bear?
  - ❖ Must consider return in conjunction with risk
- ✓ More complicated when:
  - ❖ there are cash deposits and/or withdrawals
  - ❖ the manager uses derivatives to enhance the portfolio yield
- ✓ **Fiduciary duties**
  - ❖ Responsibilities for looking after someone else’s money and having some discretion in its investment

## STEP FOUR: PORTFOLIO PROTECTION

- ✓ **Portfolio protection** also known as portfolio insurance
  - ❖ A managerial tool to reduce the likelihood that a portfolio will fall in value below a predetermined level.

# Stages of Portfolio Management

- ❖ Learn the basic principles of finance
- ❖ Set portfolio objectives
- ❖ Formulate an investment strategy
- ❖ Have a game plan for portfolio revision
- ❖ Evaluate performance
- ❖ Protect the portfolio when appropriate

