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# **Financial Education - basics**

**basics**

**03 giu 2025**



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This book is meant to collect some notes about financial instruments and methods for financial education, and mainly focused asset allocation.

This material is part of the **basics-books project**. It is also available as a .pdf document.

- Introduction
  - *Summary*
  - *References*
  - *Actors*
  - *Inflation*
  - *Policy*
- Investing Principles
  - *Principles of investing*
- Asset classes
  - *Introduction to asset classes*
  - *Bonds*
  - *Equity*
- Asset allocation
  - *Introduction to investing*
  - *Modern Portfolio Theory*
  - *Capital Asset Pricing Model*



## **Parte I**

# **Introduction**





# CAPITOLO 1

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## Summary

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### **Introduction**

Financial goals; money; inflation (BC and inflation target);

### **Asset classes**

### **Asset allocation**



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## References

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Here some references to other sources, in order to reasonably organize the contents of this book

### **Investment and Portfolio Management - RICE - coursera - A.Ozoguz, J.Foote**

#### **Global Financial Markets**

- Intro and Review of Elementary Finance Tools
- Financial system and financial assets: fixed income, equity and derivatives
- Organization of financial markets and securities trading

#### **Portfolio Selection and Risk Management**

- Intro and R/R: R/R trade-off
- Ptf construction and diversification
- Investor choices: utility functions, mean-variance preferences
- Optimal capital allocation and portfolio choice: mean-variance optimization (Modern Portfolio Theory)
- Equilibrium asset pricing models: CAPM, return-beta; multi-factor models (e.g. Fama-French)

### Biases and Portfolio Selection

- Efficient Market Hypothesis (EMH), and anomalies
- Biases and realistic preferences
- Inefficient markets: equity premium, volatility puzzle (?), long-run reversal to the mean, value effect, momentum
- Investor behavior

### Investment Strategies and Portfolio Analysis

- Performance measurement and benchmarking
- Active vs passive investing:  $R^*$  risk-adjusted return measurements: Sharpe, Sortino, Treynor's ratio, Jensen's  $\alpha$ , ...; comparing the  $R^*$
- Performance evaluation: style analysis and performance attribution

### Capstone: Build a Winning Investment Portfolio

Using software for building ptf and assess its properties

- ...

### **3.1 People**

### **3.2 Private companies**

### **3.3 Government - public**

### **3.4 Banks**

#### **3.4.1 Central banks**

#### **3.4.2 Investment banks**

### **3.5 Foreign regions**



- Definition and measurements of inflation
- Example: Italy (ISTAT). NIC, FOI, IPCA; sectors: weights, and sector IPC
- Who controls inflation, and how? One of *CB* goals: inflation target; means: monetary policy
- Origin of inflation?
  - short-, medium-run: cost-push, demand-pull, built-in (triangle model)
  - long-run: «monetary always and everywhere a monetary phenomenon» M.Friedman





	Monetary Policy	Fiscal Policy
Controlled by	CB	Government
Main tools	IR, Money supply	Taxes, Spending, Transfers
Speed	Usually faster	Politically slower, debated
Focus	Inflation, liquidity, credit	Employment, Income distribution
Independence		

## 5.1 Monetary policy

## 5.2 Fiscal policy



## **Parte II**

# **Investing Principles**



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## Principles of investing

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**Goals:** personal wealth management, to reach personal (reasonable) goals. Person-dependent goals; minimal reasonable goal: preserve real value of personal wealth (purchasing power)

Human beings usually tend to behave to optimize a personal «utility function».

**Some principles:**

- No return w/o risk
- Assets usually show auto-correlation in the short-, mid-, regression towards the mean in the long-term
- If one is buying, someone else is selling

Random topics:

- real vs. nominal: inflation
- Risk/Reward
- diversification
- volatility drag
- PIC vs. PAC



## **Parte III**

### **Asset classes**





## CAPITOLO 7

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### Introduction to asset classes

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## CAPITOLO 8

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Bonds

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## CAPITOLO 9

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Equity

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## **Parte IV**

# **Asset allocation**





## CAPITOLO 10

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Introduction to investing

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# CAPITOLO 11

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## Modern Portfolio Theory

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## CAPITOLO 12

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### Capital Asset Pricing Model

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