

# FINA 3103: Intermediate investments

Lecture 1 – Review of the Syllabus & Course Overview,
The Investment Environment and Financial Markets





### Contacting me

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  - my name is pronounced as ja(r)-lin you
  - With intonation:
    - ja(→)lin(¬)you(¬)
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#### **Investments**

What is an investment?

Current commitment of money (or other resources)



- Current vs. future:
  - Sacrifice now and get something back later
- Expectation:

The future benefits are uncertain

## What Will You Do With \$5,000?

- Imagine one day you wake up and find that you are HK\$5,000 richer
- What will you do?
  - Invest?
  - Consume?

## My Answer

- How will I spend it?
  - Suppose my original wealth was \$100,000
  - And suppose my original investment portfolio was 50%
     Stock, 30% Bond, 20% Cash
  - i.e., \$50,000 Stock, \$30,000 Bond, \$20,000 Cash
- Now, with the additional \$5,000, I will have \$105,000
  - My portfolio weights can still stay the same:
  - 50% Stock, 30% Bond, 20% Cash
  - i.e., \$52,500 Stock, \$31,500 Bond, \$21,000 Cash

#### **This Course**

How to invest wisely in an uncertain environment

(Not how to predict the future!)



- Fundamental aspects of investments
  - Asset classes and financial markets
  - Money allocation
  - Risk and Risk Premium
  - Evaluating portfolio managers

## **Outline of Today's Lecture**

Review of the Syllabus

Course Overview

Real Assets and Financial Assets

• Financial Markets and The Economy



## Now, Syllabus

#### **Lecture Slides**

 Slides will be available on the course website at least one day before each lecture

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#### Course Outline

- Main Topics
  - Markowitz optimal portfolio
  - CAPM
  - Fixed Income (bonds)
  - Intro to Derivatives

#### 1. The Basics

- Financial Assets
  - Equity
  - Fixed-income securities
  - Derivatives (futures and options)
- Financial Markets
  - Why do we need financial markets?
  - How do we trade securities?



## 2. Money Allocation

- Money allocation across different assets/securities
  - How to invest money wisely
    - The risk-return relationship:
       High expected return, high risk
    - Not how to get rich quickly the fastest way is gambling (if you are lucky), which also is the fastest way to lose
  - Diversification to reduce risk

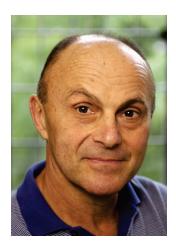
Prof. Harry Markowitz, Nobel Laureate 1990

## 3. Asset Pricing

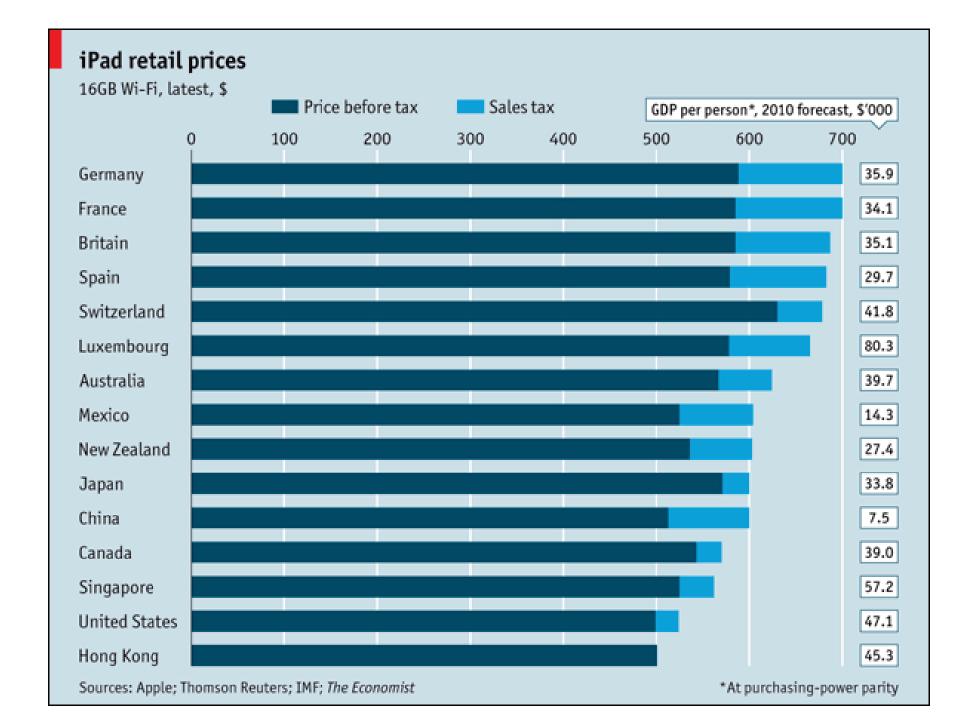
- Determine the fair price of a security
  - An important concept:
     Law of one price



Prof. William Sharpe, Nobel Laureate 1990



Prof. Eugene Fama Nobel Laureate 2013



#### HONG KONG



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NEWS . HONG KONG . ECONOMY LIFESTYLE

#### Hong Kong shoppers flock to Chanel stores as it slashes prices due to falling euro

Fashion chain cuts prices in Hong Kong by 20pc as the euro weakens against other currencies

Amy Nip amy.nip@scmp.com PUBLISHED: Wednesday, 18 March, 2015, 5:31pm UPDATED: Friday, 20 March, 2015, 1:13pm



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## 3. Asset Pricing: Arbitrage

- Violation of law of one price = arbitrage opportunity
- What is arbitrage?
  - "Free lunch"
  - A zero-risk, zero-net investment strategy that still generates profits
- How to make arbitrage profits?
  - Buy low, sell high!
- What will happen?
  - Prices will converge and arbitrage profits disappear

## 4. Market Efficiency

- Example
  - A stock is trading at \$60
  - Suppose a investor has a crystal ball, and knows the true price is \$100.

What would he/she do?

Buy HSBC! (a lot)

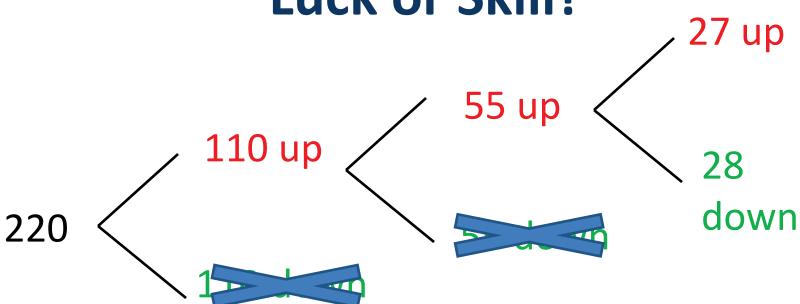
- What will happen?
- HSBC share price will increase to \$100
- In an efficient market, prices reflect all available information

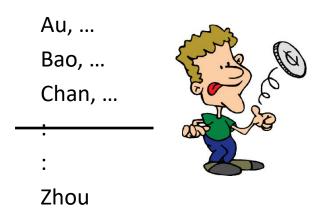
#### 4. Portfolio Evaluation

- We will see that financial markets may not always be 100% efficient
  - Some investors could earn higher returns because of their information/skills
  - But apparently high returns could be due to luck as well

The important issue here is to separate luck and skill

## **Luck or Skill?**





#### 5. Other Securities

- Fixed-income securities
  - Government bonds
  - Corporate bonds
  - A portfolio of fixed-income securities
- Derivatives
  - Futures
  - Options





Prof. Merton & Prof. Scholes, Nobel Laureates 1997

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✓ Course Overview

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#### **Real Assets & Financial Assets**

#### Real Assets

- Assets used to produce goods and services
- Examples: the land, buildings, machines, and human capital (knowledge)

#### Financial Assets

- Claims on real assets
- Do not contribute directly to the productive capacity

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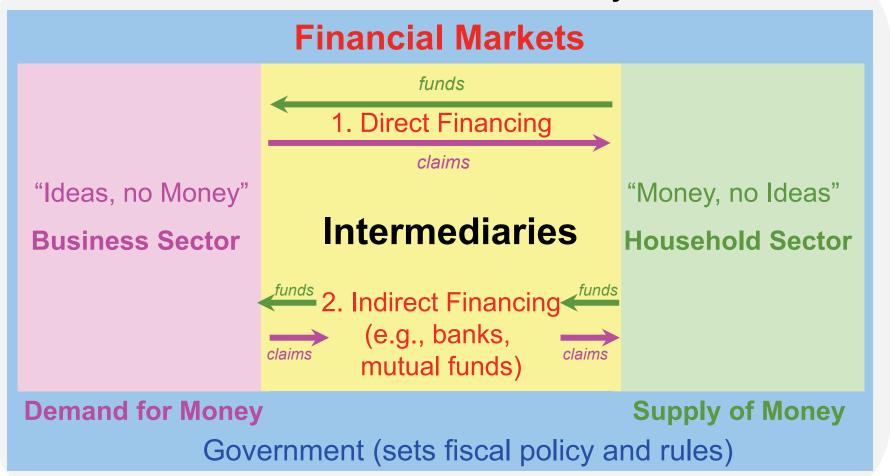
✓ Course Overview

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## Financial Markets & The Economy

The Whole Economy



#### **Financial Markets**

- Primary Market
  - New issues of assets/securities
  - Described in the previous slide
- Secondary Market
  - Already existing assets/securities are bought and sold
  - For example: stock exchanges



#### **Functions of Financial Markets**

- Why do we need financial markets?
  - 1. Allocation of capital
  - Grow now, pay later (stocks, bonds)



- 2. Consumption timing
- Save now, spend later (invest)
- Buy now, pay at a different time (sell past investments or borrow)



### Functions of Financial Markets (cont'd)

- Allocation of risk
- Investors select the risk—return characteristics that best suit their preferences
- Securities sold for the best possible price
- 4. Separation of ownership and management
- Buy/sell stocks and bonds (vs. hire/fire managers)
- Firm managers should pursue strategies that enhance shareholder value