

FINA 1303

INTRODUCTION TO FINANCIAL MARKETS

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Course Objective

Knowledge is
nothing without
understanding

- Understanding
 - Fundamentals of DCF and interest rates
 - Basic asset pricing and stock valuations
 - What are the major types of financial institutions
 - What they do in practice
 - How they overlap with each other
 - How they are regulated (if time allows)
- Special focus on the **Asian markets** as much as possible
- The approach will be very **practical**
 - Drawn from real life experience
 - Exposure to market practice

Grading



■ Assessment:

The final grading will be determined as follows:

Participation	10%
4 Online Quizzes	20%
Group Assignment	20%
Exam I	25%
Exam II	25%

Participation

- Despite the large class size I intend to make this course as **interactive** as possible
- I expect students to engage actively in class and online with each other and with me and our TA.
- Participation represents **10%** of the grade
- Points will be awarded based on active involvement in class, and participation in class through iPRS, raise hands (unmute yourself to speak out for online lecture) and Canvas discussion board.

Personal Response System (PRS)

- We will be using iPRS in every class so you can participate in class exercises and earn participation credit
- You must use iPRS app on your smartphone.
- Make sure you login to iPRS apps (HKUST I learn) every time, as participation counts!



Online Quizzes

- Are designed to check that you have mastered the key concepts from the class
- Will help prepare you for the exams
- Will be spaced out through the course
- Will be taken online in a limited time
- Will cover materials covered in class
- Will take the form of MCQ and T/F questions
- Represent **20%** of the grade (5% each)

Group assignment

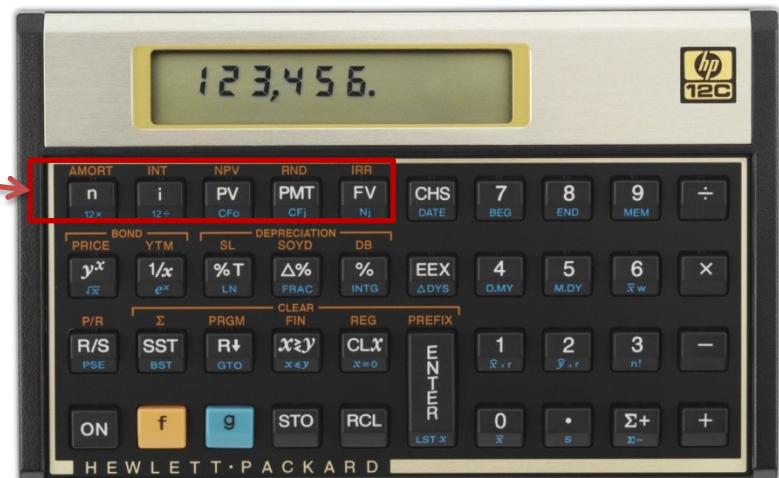
- You will be formed into groups of 6-7 students (final number TBC)
- Assignment 1:
 - Each group will be assigned a topic from the course content by lucky draw
 - Each group has to submit one (short) video and one (short) article that I can use for this course and will be called upon to present their topic
 - Your submission for assignment 1 is due in Week 4.
- Assignment 2:
 - Each group will be called upon to give a digest of significant financial news in the week assigned to them by lucky draw, and submit a PowerPoint presentation with voice over ppt.
- These submissions accounts for **20%** of the grade (10% each)
- Grading will be based on the relevance of the submissions to the course and maximum points will be obtained for videos and articles that will be integrated in the course.
- You will be asked to do peer evaluation at the end of the course.

Exams

- There will be 2 exams, one roughly half-way through the course and one at the end during the final exam period.
- Midterm will be **during class time**. Time for Final exams will be scheduled by the school. Both Exams will be **face to face/ online (TBC)** . Please do not plan to travel during the exam periods as there will be **no make ups**
- **You MUST report to TA any time conflict for the Midterm no later than the add-drop period**
- Make yourself familiar with the exam rules of the school and HKUST. Be reminded that academic integrity is taken extremely seriously at HKUST.
- The mid-term will represent 25% of the grade and the final 25%. Exams will include mostly MCQ and T/F questions but may also include some open questions.

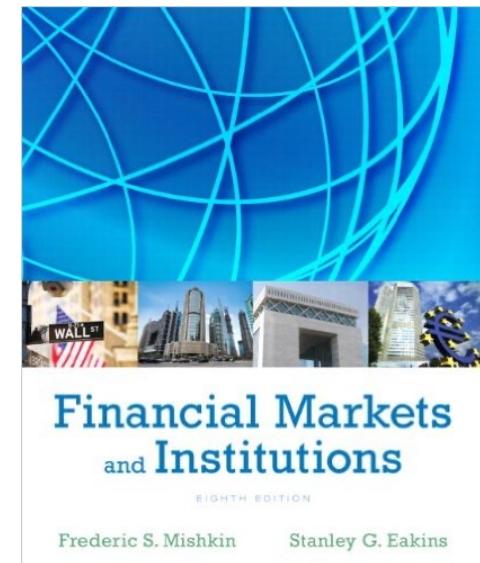
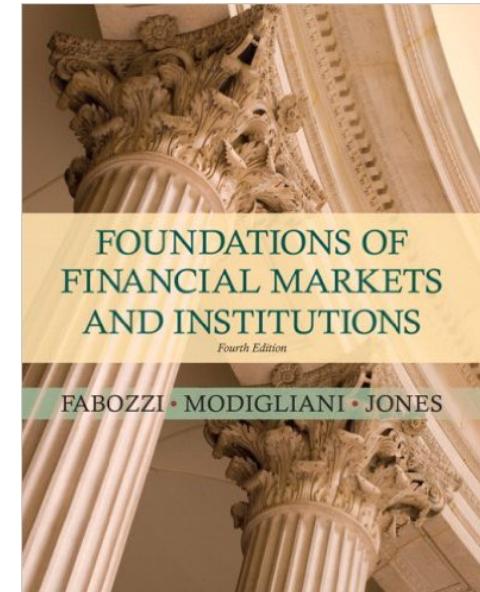
- Financial calculators have built-in functions that save time in solving time value of money problems, and their use is permitted in examinations. We will also work on examples in lectures.
- It is suggested that you procure a financial calculator and become proficient in using its time value of money functions. You should refer to the user manual for instructions.
- Financial calculator: recommended models – **TI BA II Plus or HP 12C**
- NOTE: Programmable calculators and calculators with text display functions are NOT allowed during examinations. All HKEAA approved calculators are allowed during examinations.

Financial Calculator



Textbook

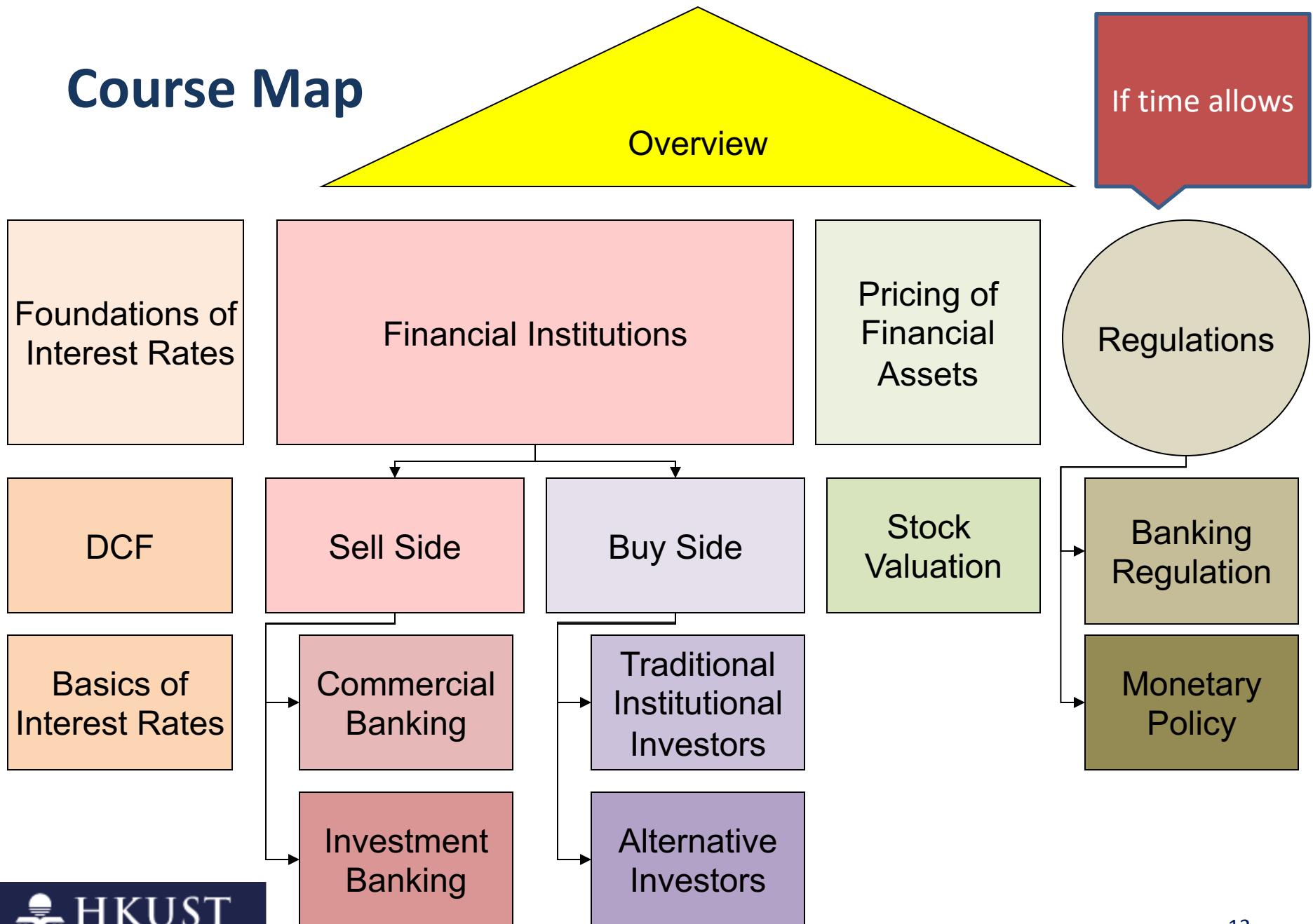
- There are two **suggested** textbooks:
 - Fabozzi/Modigliani/Jones
 - Mishkin/Eakins
- Both are available in the library and the bookstore
- **Neither are required**, and the course does not strictly follow either
- However the textbooks may be useful for your own study, for example end of chapter questions



How to study for this class

- All parts of the grade count: prepare all assignments on time
- **Attend all classes**, and review the video if you have missed it. Not everything is on the slides!
- Review the slides and your notes carefully before the exams
- PRS questions and quizzes are designed to help you prepare for the exams, which will follow a similar format (MCQ and T/F). Review those carefully before the exams.
- **Ask questions** if you don't understand! Raise your hand in class. Catch me or Benson after class, make an appointment, email....
- **Participate**

Course Map



Course Tentative Agenda

First Half: Overview, Rates, Financial Intermediation, Sell-side



- Week 1,2(Feb 4,7,11,14) :
Introduction; overview of financial markets
 - *End of Add/Drop period: 17 Feb*
 - *Group formed due: 17 Feb*
- Week 2, 3(Feb 18, 21) : Discounted Cash Flows and Interest Rates basics (Part I), (part II)
- Week 3, 4 (Feb 25,28 Mar 4):
Financial intermediation; types of Fis
 - *Group Submissions due (28 Feb)*
 - *Online Quiz I (4 Mar)*
- Week 5 (Mar 7, 11): The sell-side: commercial banks
- Week 6 (Mar 14, 18): The sell-side: investment banking
 - *Online Quiz II (Mar 22)*
 - *Mid-term Exam(Mar 25)*

Course Tentative Agenda

Second Half: Buy-side, Pricing Basics,

Regulation, Monetary Policy

- Week 7 (Mar 21): Fundamentals of pricing : stock valuation and asset pricing basics
- Week 8 (Mar 28, Apr 1) : The buy-side: insurance
- Week 9 (Apr 4,8) : The buy-side: pensions and retirement
- Online Quiz III (Apr 12)
- Week 10 (Apr 11, Apr 22) : The buy-side: asset management
- Week 11 (Apr 25,29): The buy-side: alternatives
- Week 12,13 (May 2, 6, 9) : Central banking & monetary policy, bank regulation
 - Online Quiz IV (May 10)
- ***Final Exam Period: Exam II***

Copyright Issues

- The lectures **will be recorded** by UST
- Videos will be made available on CANVAS and are subject to copyright; students are **not** allowed to copy, duplicate or disseminate the videos without prior written consent
- **No other recording or taping is allowed**
- The lectures notes are provided to you for single use. You may not copy or distribute all or any part of the notes without the written consent of the Lecturer.
- Please be aware of intellectual property issues in all your work and presentations. Take care to indicate the source of your quotes and include a reference list at the end of your presentations.
- **Plagiarism is not tolerated at HKUST.** Plagiarism software may be used in evaluating homework and clear cases of plagiarism will impact your grade significantly.



Contact Info

Instructor: Prof. Veronique Lafon-Vinais

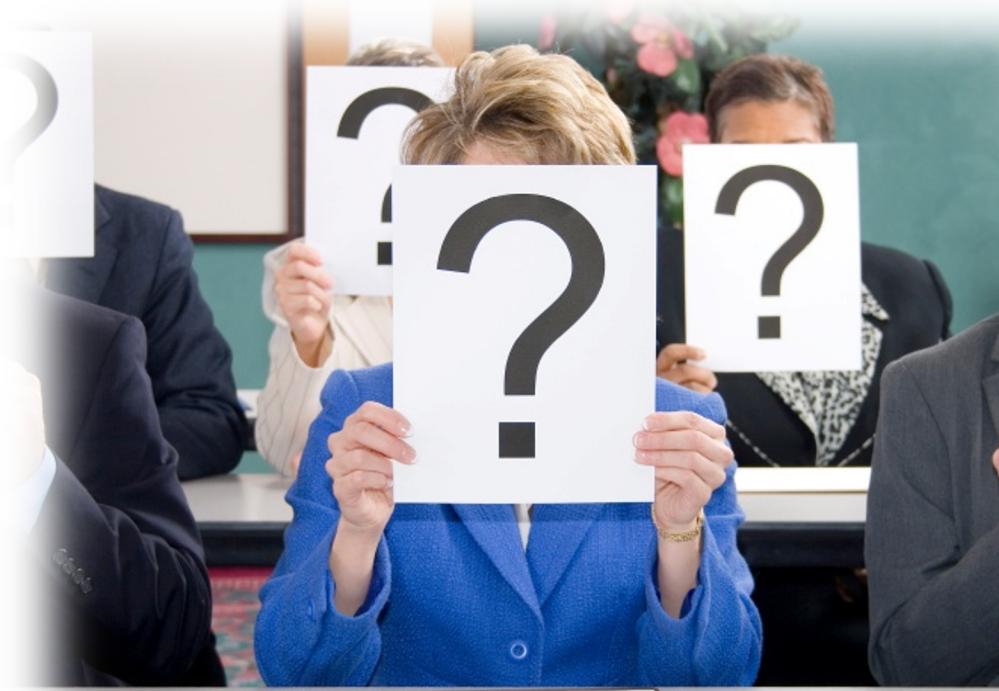
- Email HKUST: vlafon@ust.hk
- Telephone: office: 2358-7686 (please do NOT leave voice mail)
- Mail to: Department of Finance, HKUST
- Meeting **by appointment only**

TA: Benson Leung

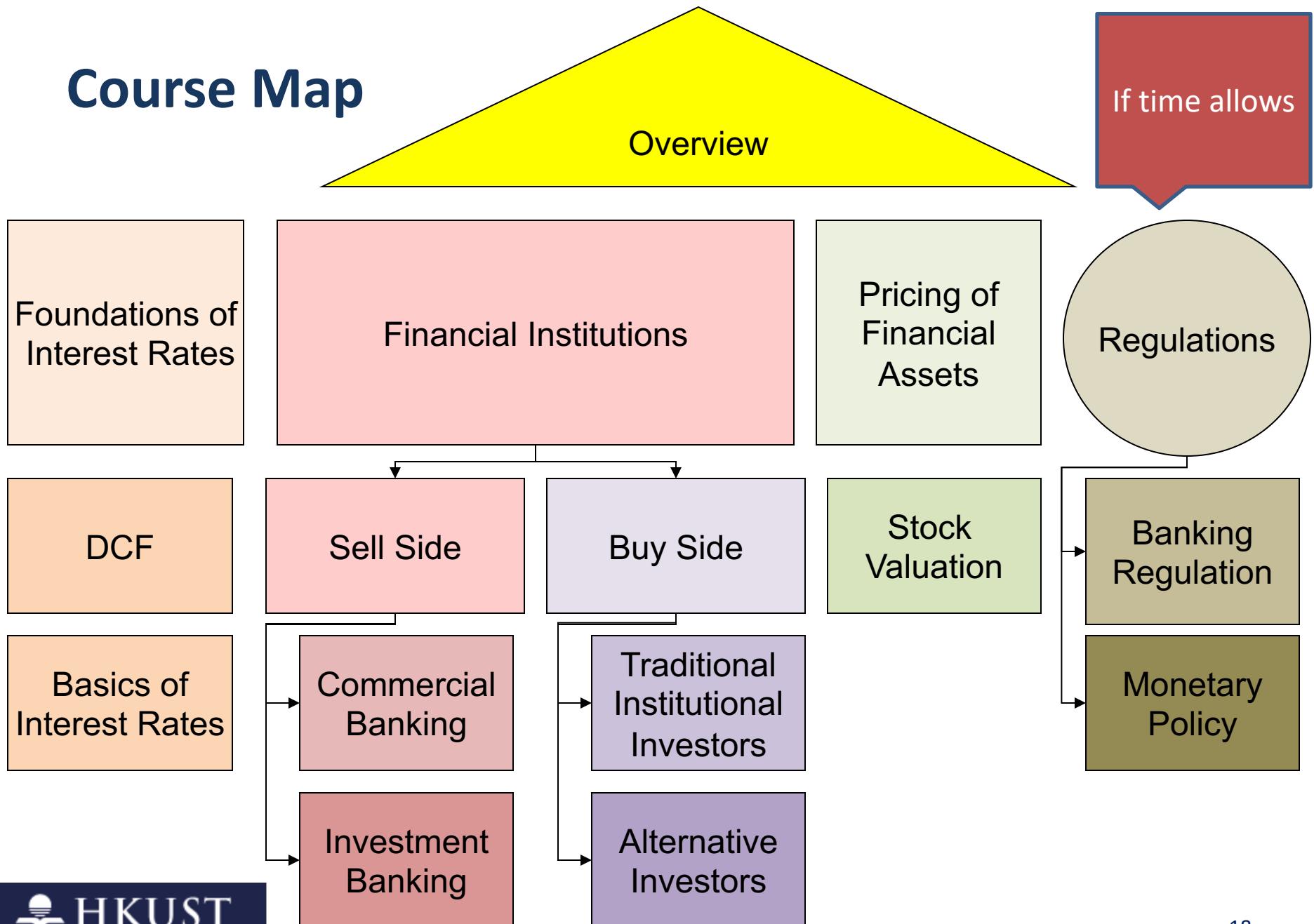
- E-mail: bbsleung@ust.hk
- Meeting by appointment only

Ask Questions

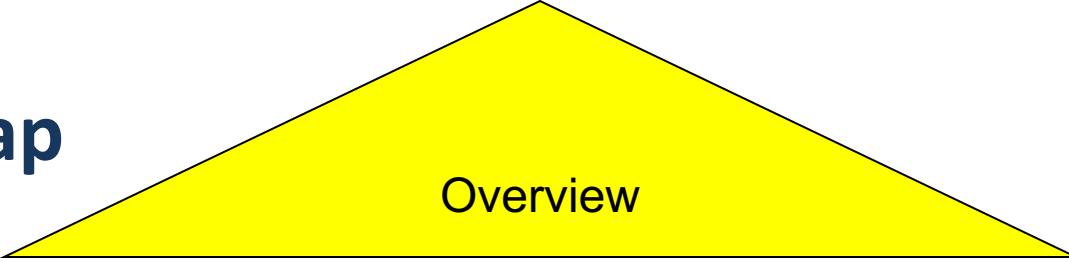
- Definitions, terminology & jargon
- Never take anything for granted
- Nothing new under the sun
- No stupid questions
- No one has all the answers
...not even me!



Course Map



Course Map



Overview

- **The Language of Business**
- What is finance? Why do we need a financial system?
- Who are the players?
- How does it work?

Quick reminder on types of firms

- When setting up a business, you have to decide which type of **legal structure** to use
 - There are many different types of legal structures ranging from sole proprietorship to listed limited liabilities corporations.
- The choices available to you depend on the country of incorporation's **legal system**.
 - For example, Hong Kong's legal system is based on English law and is quite different from the US which has both federal law and different state laws
 - New York law is different from Delaware law, for example

Some examples of corporate organization in the financial industry

- Mutual funds: **mutual organization**: the investors are also the shareholders (in a mutual organization, customers are the shareholders)
- Banks: typically listed corporations (**limited liability companies**) but some are cooperatives or credit unions (a form of mutual organization)
- Insurance: can be limited liability companies or mutual organizations
- Hedge Funds and Private Equity Funds: **limited partnerships**, with General Partners and Limited Partners
- In the economy there are all forms of organizations, including many **sole proprietorships**, but the organizations we discuss in class are mainly limited liability companies (generally publicly listed)

The corporation

- In business and finance classes, we generally focus on **publicly listed corporations**, which are limited liability companies.
- A corporation is a **legal entity** in its own right. It has rights and obligations under the relevant legal system.
- In such entities, the owners are the **shareholders**, but their liability is limited to the amount they have invested to buy the shares.
- The corporation has a **governance structure**, whereby the shareholders appoint a board of directors to represent their interests, and the board appoints a management team headed by a CEO.

Why does it matter?

- The choice of legal structure has important implications:
 - Risk for the different parties
 - Tax
 - Conflicts of interest
 - Possibility to raise capital
 - Survival of business

Pop Quiz!

- What makes mutual organizations different?
- If my friend and I are lawyers and we want to set up our own law firm, what legal structure should we use?
- If you are a shareholder in a publicly listed corporation, are you responsible for the debt of the company?

Financial Statements

- **Financial statements** are accounting reports issued periodically to present past performance and a snapshot of the firm's assets and the financing of those assets
- Regulations generally require publicly listed companies to file their annual financial statements with listing authorities; they must send an **annual report** together with their financial statements to their shareholders. The annual report is a yearly summary of the business. It must generally be verified by an **auditor**.
 - Example: CX annual report https://www.cathaypacific.com/content/dam/cx/about-us/investor-relations/interim-annual-reports/en/annual_report_2019_eng.pdf
- Investors, financial analysts, managers, and other interested parties such as creditors rely on financial statements to obtain reliable information about a corporation

Accounting standards

- Accounting standards provide the “language” of financial statements.
- There are different types of standards, like there are many languages – in the old days, each country had its own set of Generally Accepted Accounting Principles “**GAAP**”.
- Two main global standards nowadays, which are broadly converging:
 - **IFRS** (International Financial Reporting Standards) which are increasingly adopted worldwide (currently > 100 countries)
 - **US GAAP** in the US only, but companies who want to issue securities in the US market have to convert their statements to US GAAP (unless they use IFRS)

Quick Search!

- Find out which accounting standards are used in your country

Role of the auditor

- Financial statements generally must be reviewed and certified by an auditor.
- The auditor must check that the financial statements present a true picture of the financial health of the company, and must sign off on the statements by providing a statement to the shareholders
- Problem: conflicts of interest.

Pop Quiz!

- Why do firms have to publish financial reports?
- Why does it matter that there are different accounting standards?
- What is the role of auditors?

Types of Financial Statements

- The main types of financial statements are:
 - Balance sheet (statement of financial position)
 - Income statement (profits and loss account)
 - Cash flow statement
 - Statement of changes in shareholders equity

The Balance Sheet

- Also called “Statement of Financial Position”
- Lists the firm’s **assets** and **liabilities**, as well as **shareholders’ equity**
- Provides a snapshot of the firm’s financial position **at a given point in time**

In simple terms, a balance sheet presents a picture of what the firm OWNS (assets) and OWES (liabilities) at a specific point of time.

Illustration: Global Corporation Balance Sheet for 2012 and 2013

ASSETS	Assets	2013	2012	Liabilities and Stockholders' Equity	2013	2012	LIABILITIES
Uses of Capital – What we OWN	Current Assets			Current Liabilities			Sources of Capital – What we OWE
	Cash	23.2	20.5	Accounts payable	29.2	26.5	
	Accounts receivable	18.5	13.2	Notes payable/short-term debt	5.5	3.2	
	Inventories	15.3	14.3	Total current liabilities	34.7	29.7	
	Total current assets	57.0	48.0	Long-Term Liabilities			
	Long-Term Assets			Long-term debt	113.2	78.0	
	Net property, plant, and equipment	113.1	80.9	Total long-term liabilities	113.2	78.0	
	Total long-term assets	113.1	80.9	Total Liabilities	147.9	107.7	
				Stockholders' Equity			
				Common stock and paid-in surplus	8.0	8.0	
The difference between assets and liabilities is the shareholders' equity				Retained earnings	14.2	13.2	The firm's net worth
				Total Stockholders' Equity	22.2	21.2	
Total Assets		170.1	128.9	Total Liabilities and Stockholders' Equity	170.1	128.9	

The Balance Sheet

- The Balance Sheet Identity
 - The two sides of the balance sheet must **balance**

The Balance Sheet Identity

Assets = Liabilities + Stockholders' Equity

- If we OWE more than we OWN we have negative equity
- It should not be possible and is generally not desirable but we will see that the book value and the market value may be different, allowing successful firms to borrow more than the book value of their assets

Shareholder's Equity (Capital)

- Shareholders' (Stockholders') Equity
 - The difference between Assets and Liabilities constitutes the shareholders' equity – also called **book value** of equity
 - An accounting measure of the **net worth** of the firm
 - Main components:
 - Share (equity) capital (money invested directly by shareholders in exchange for **shares** of the company)
 - Retained earnings (reinvestment of profits)

Market v. Book Value

■ Market Value v. Book Value

— **Book value** of equity

- Net worth from an accounting perspective
- Assets – Liabilities = Equity
- True value of assets may be different from book value because (i) the true value of an asset may be different from its book value and (ii) many valuable assets are not captured on the balance sheet: ex: reputation, quality....

— **Market capitalization** (also called market value of equity)

- Market price per share times number of shares
- Does not depend on historical cost of assets

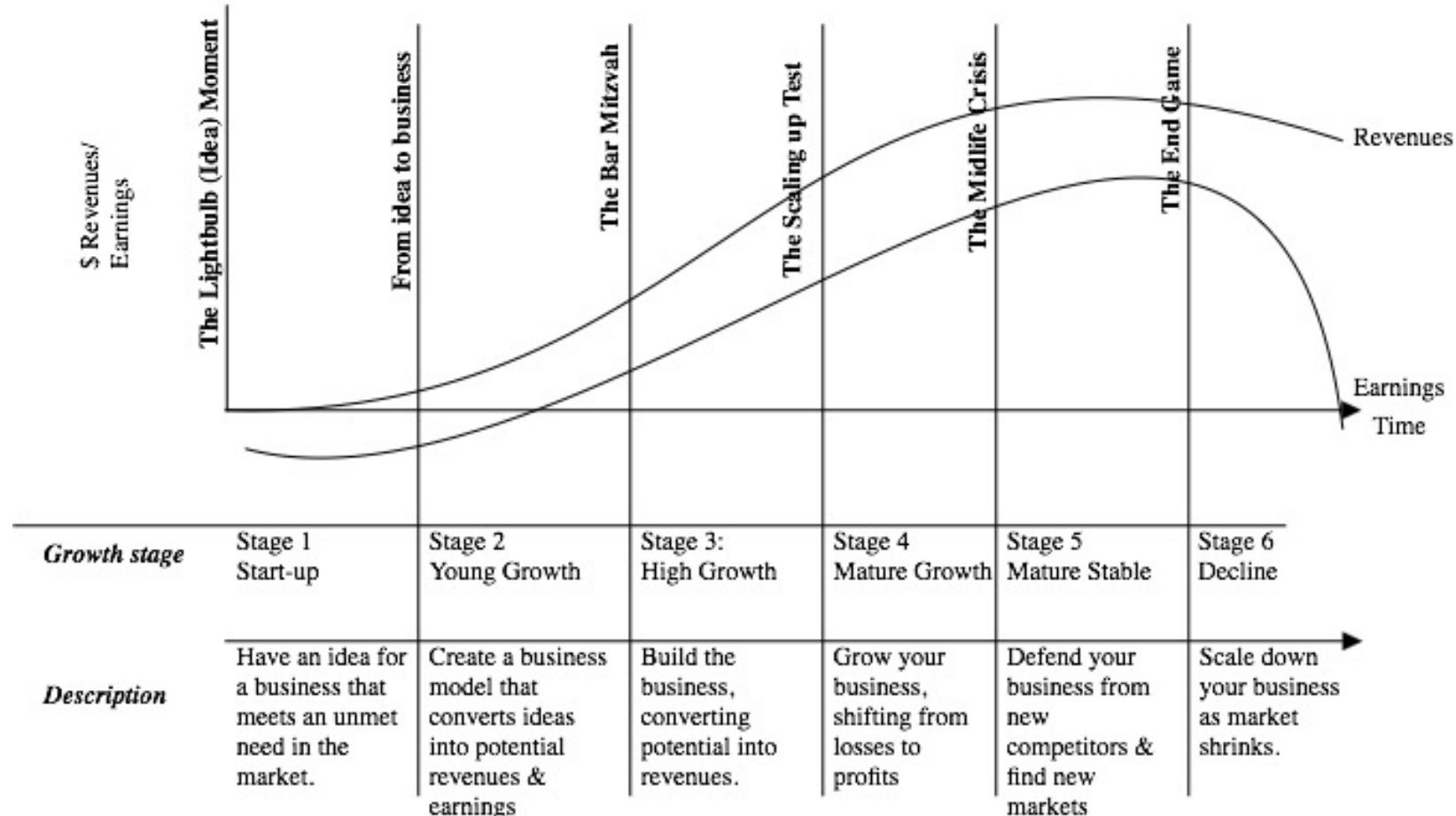
Quick Search!

- Find out what is the book value (annual report 2019) and the market value (market cap) of Cathay Pacific (today)

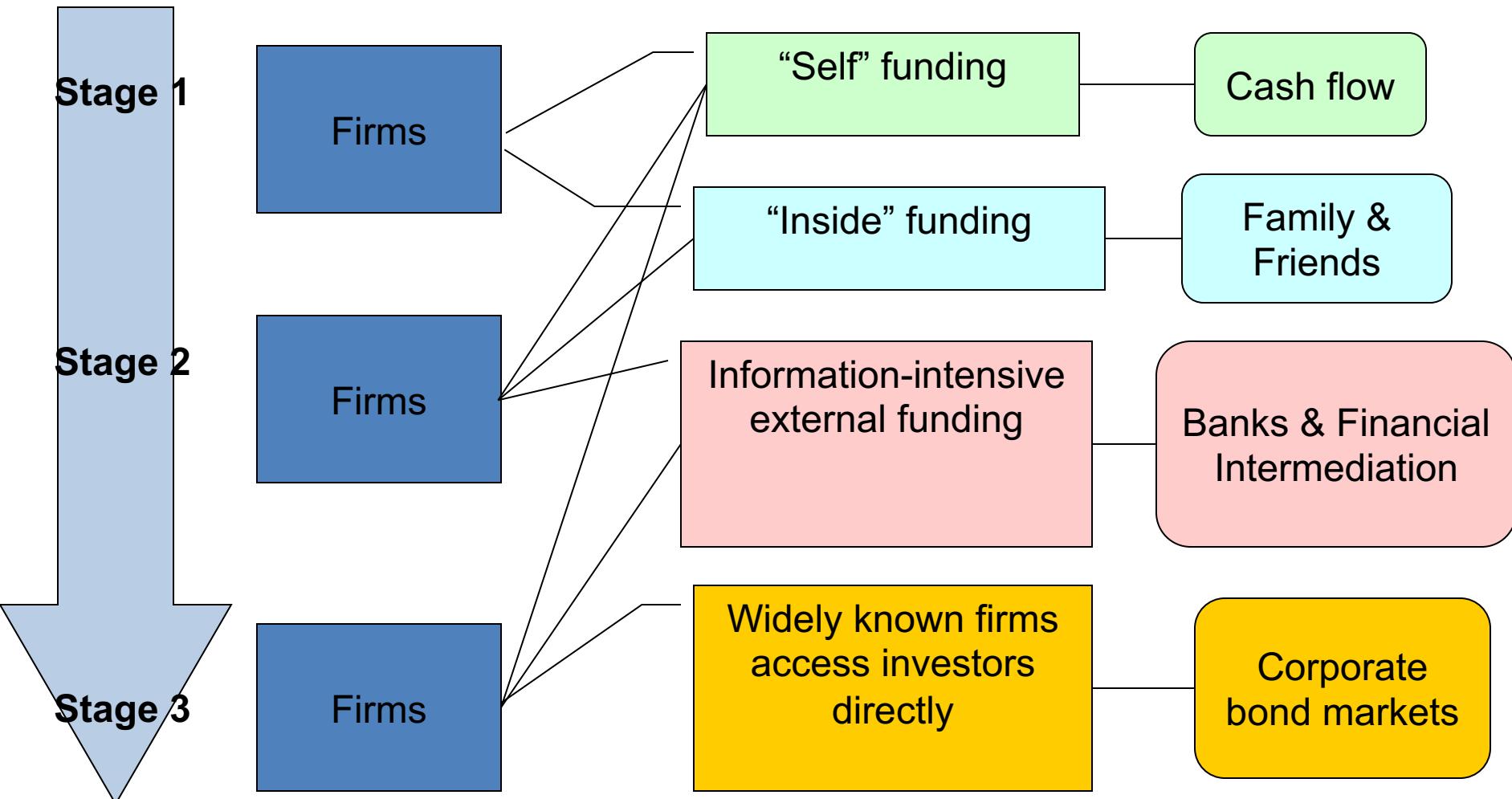
Funding the business

- Funds come from 2 main sources (as evidenced by the balance sheet):
- Equity (Capital) => shares/stocks
 - To start a business we source money from the **3Fs** (friends, family & fools) by issuing **shares** (stock)
 - Later on, we can raise more money from **financial investors** (generally angel investors, venture capital, private equity)
 - As we become a larger business, we typically get listed (IPO) and raise money from the general **public (retail investors)**
- Debt (Liabilities) => loans, bonds, notes, leases...
 - We can borrow money from : suppliers (payables & trade credit); banks (loans) finance companies (leases) and investors (bonds, notes, private placements)

Life Cycle of Firms



Life cycle and funding



The Income Statement

- The income statement lists the firm's revenues and expenses over a period of time
 - Sometimes called the **profit and loss statement**, or "P&L"
- The last or "bottom" line of the income statement shows net income (also called "profits" or "earnings")
 - A measure of its profitability during the period
 - Also referred to as the firm's **earnings**

In simple terms, the income statements shows what the company earns and how profitable it is!

Illustration: Global Corporation's Income Statement Sheet for 2013 and 2012

Profit & Loss Account

GLOBAL CORPORATION Income Statement Year ended December 31 (in \$ millions)			
	2013	2012	
Revenues	Net sales	186.7	176.1
Cost of Goods Sold	Cost of sales	-153.4	-147.3
	Gross Profit	33.3	28.8
Operating Expenses	Selling, general, and administrative expenses	-13.5	-13
	Research and development	R & D	A
	Depreciation and amortization		
	Operating Income	10.4	7.1
	Other income	—	—
Net Profit, Earnings	Earnings Before Interest and Taxes (EBIT)	10.4	7.1
	Interest income (expense)	-7.7	-4.6
	Pretax Income	2.7	2.5
	Taxes	-0.7	-0.6
	Net Income	2.0	1.9
	Earnings per share: EPS	\$0.56	\$0.53
	Diluted earnings per share:	\$0.53	\$0.50

The Statement of Cash Flows

- The firm's statement of cash flows uses the information from the income statement and balance sheet to determine:
 - How much cash the firm has generated
 - How that cash has been allocated during a set period
- Cash is important because it is needed to pay bills and maintain operations and is the source of any return of investment for investors



Illustration

Global Corporation's Statement of Cash Flows for 2013 and 2012

The statement of cash flows is divided into **three sections** which roughly correspond to the three major jobs of the financial manager:

- Operating activities
- Investment activities
- Financing activities

	GLOBAL CORPORATION Statement of Cash Flows Year ended December 31 (in \$ millions)	
	2013	2012
Operating activities		
Net income	2.0	1.9
Depreciation and amortization	1.2	1.1
Cash effect of changes in		
Accounts receivable	−5.3	−0.3
Accounts payable	2.7	−0.5
Inventory	−1.0	−1.0
Cash from operating activities	−0.4	1.2
Investment activities		
Capital expenditures	−33.4	−4.0
Acquisitions and other investing activity	—	—
Cash from investing activities	−33.4	−4.0
Financing activities		
Dividends paid	−1.0	−1.0
Sale or purchase of stock	—	—
Increase in short-term borrowing	2.3	3.0
Increase in long-term borrowing	35.2	2.5
Cash from financing activities	36.5	4.5
Change in cash and cash equivalents	2.7	1.7

Pop Quiz!

- When a start-up raises equity capital from investors, does it issue shares or bonds?
- When a company needs to finance a new project with debt, will it issue shares or bonds?
- If a company is losing money, are its earnings positive or negative?
- As a retail investor, how can you invest in a company to make money from its growth?

Some important ratios and terms you should know about

- EBIT and EBITDA
- EPS

EBITDA

■ EBITDA

- Financial analysts often compute a firm's **earnings before interest, taxes, depreciation, and amortization**, or EBITDA
- Because depreciation and amortization are not cash flows (non-cash expense), this subtotal reflects **the cash** a firm has earned from operations
- This is a measure frequently used in debt covenants

EPS

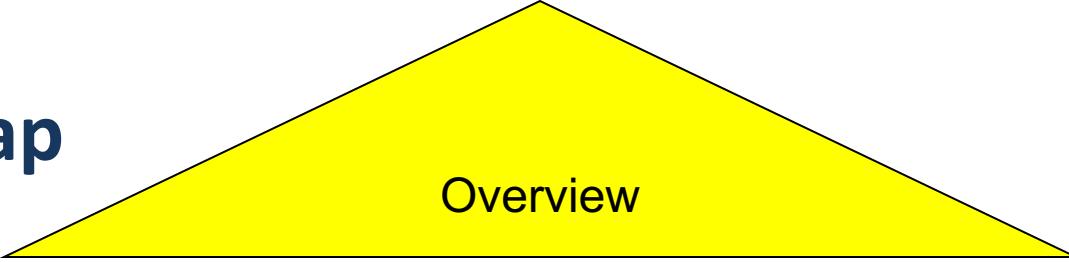
- Earnings Per Share EPS
 - Net income reported on a per-share basis

- $$\text{EPS} = \frac{\text{Net Income}}{\text{Shares Outstanding}}$$

Quick Search!

- Find out Cathay Pacific's EPS as of 2019

Course Map



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- **What is finance? Why do we need a financial system?**
- Who are the players?
- How does it work?

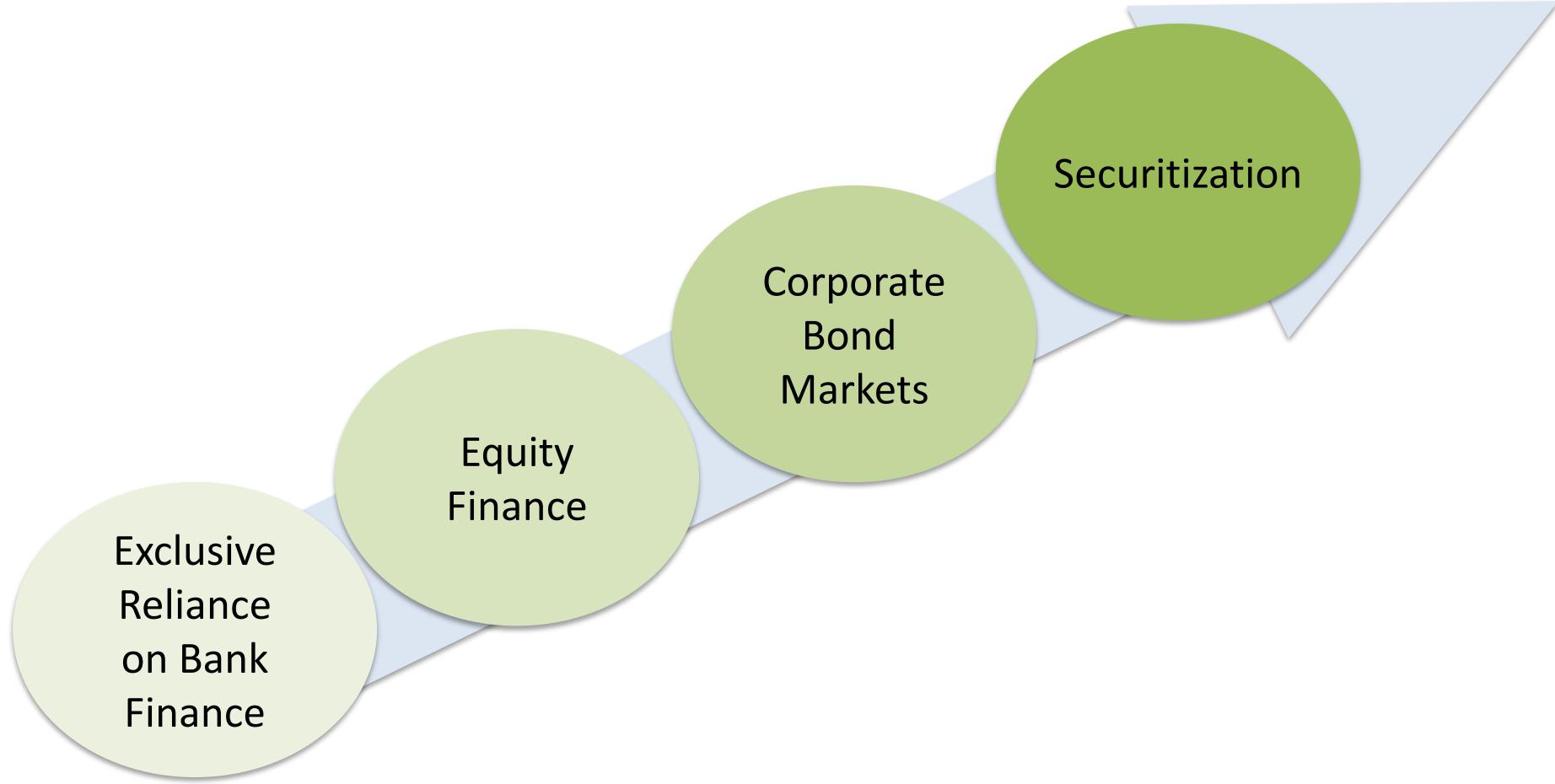
Imagine...

- A region without money...
- A country with no banking system...
- A world with no global capital flows...

Why was
Muhammad Yunus
the 2006 Nobel
Peace Prize winner?



Evolution of Financial System



Tech, tech, FinTech

- When I started working, this is the technology we had:
 - Mainframe computer
 - Telephone
 - Telex
 - Typewriter
 - Post

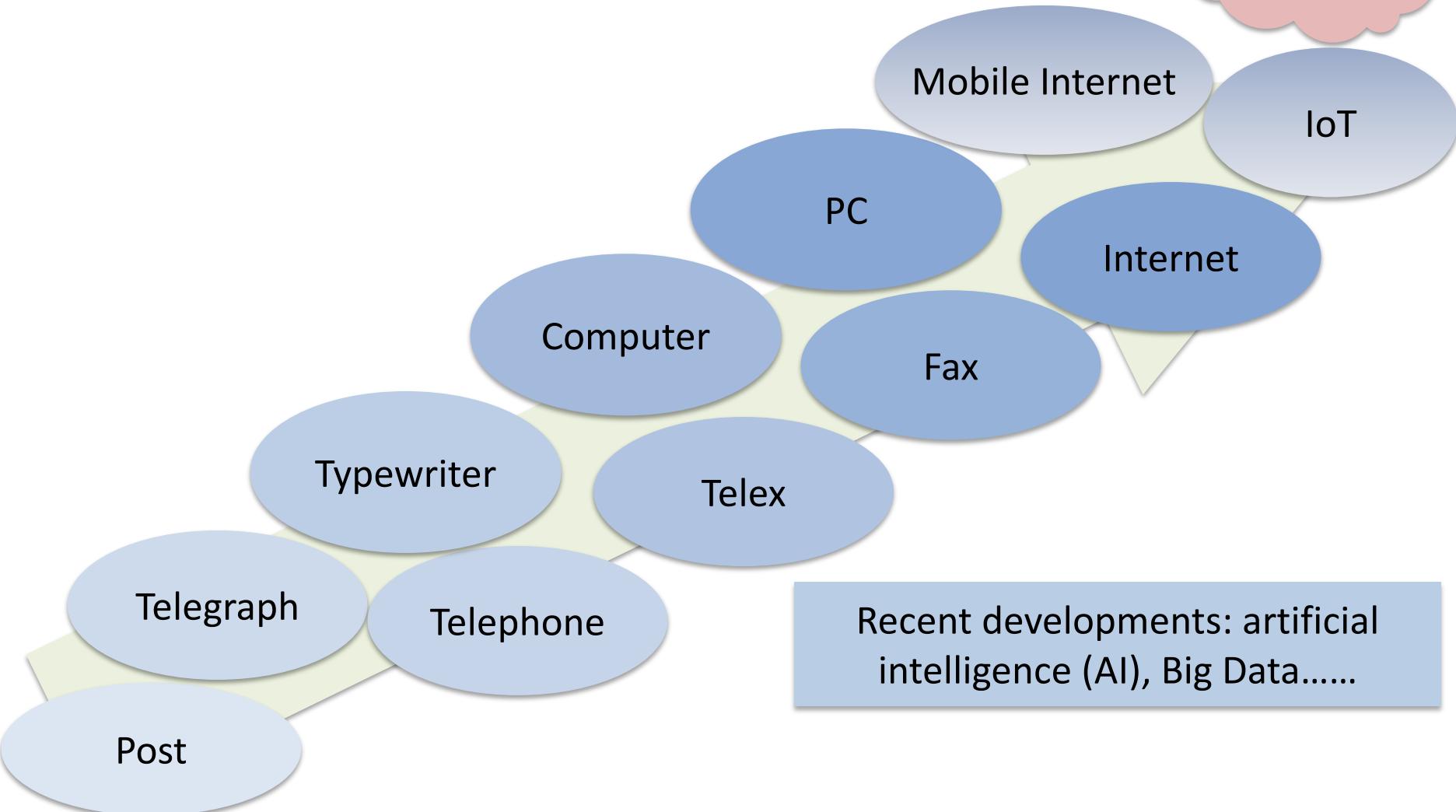


Quick Search!

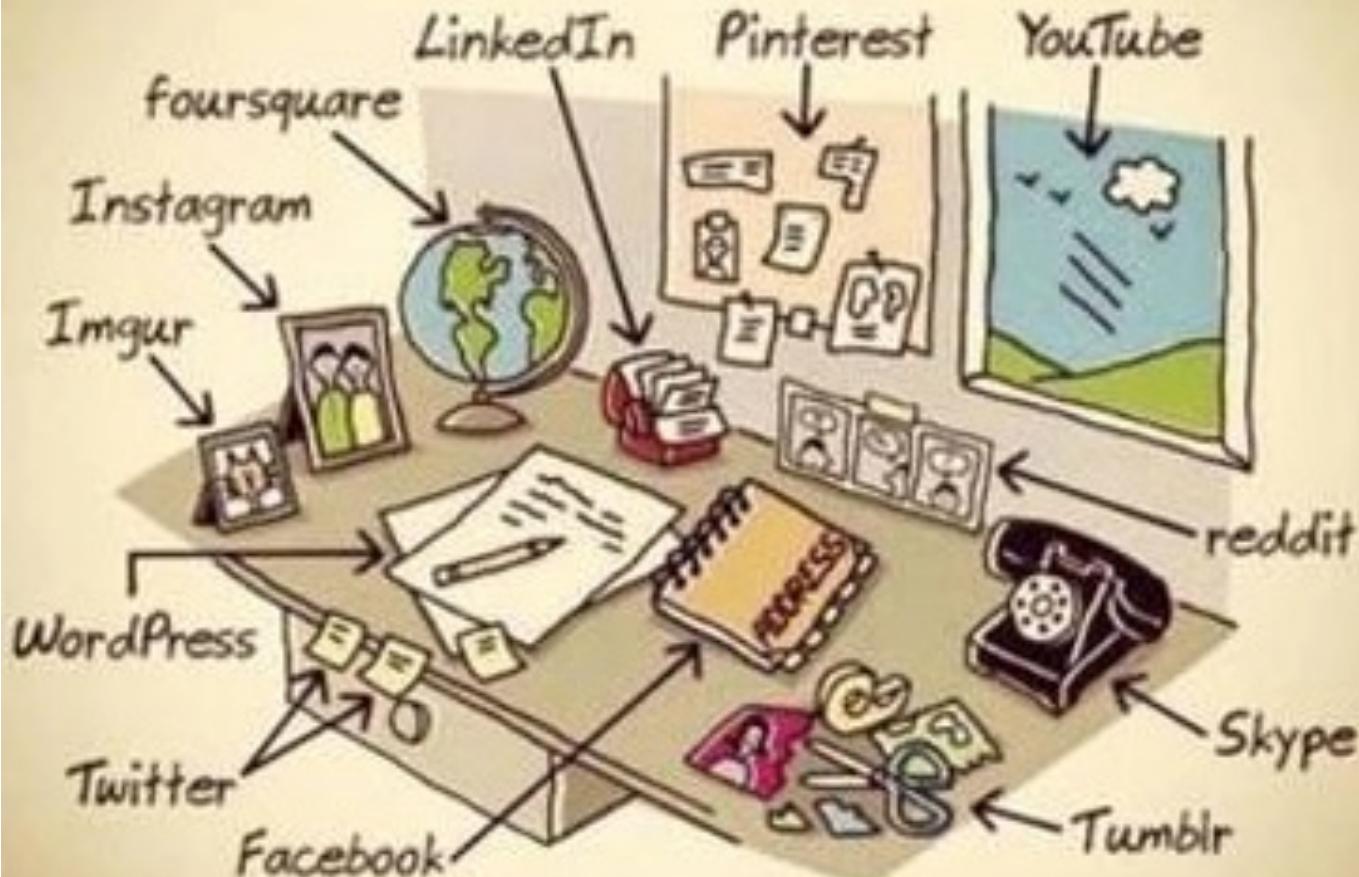
- What is a telex?

Disruptive Technologies

The next
big thing?



the world before social media...

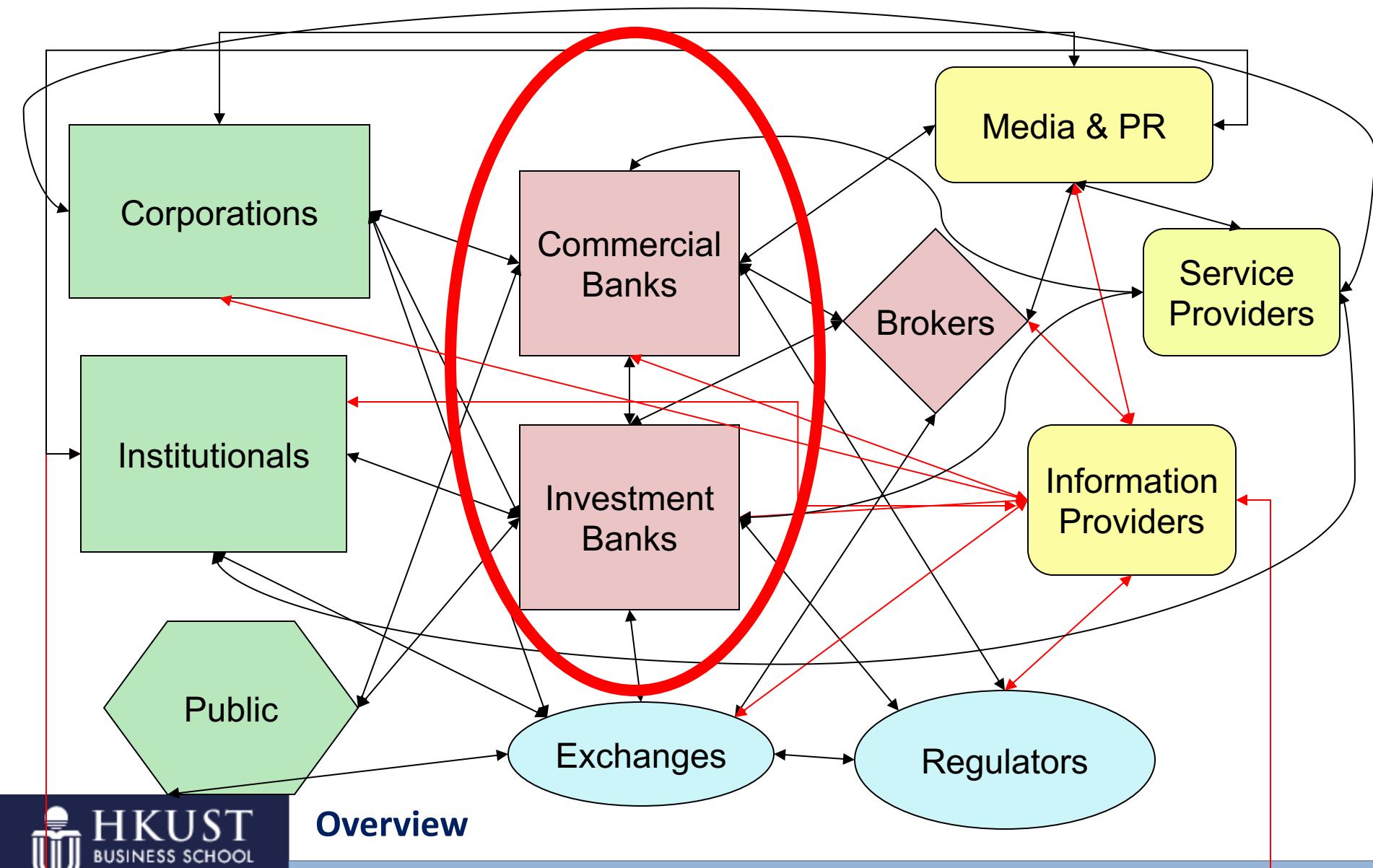


Class discussion

- What do we need for financial markets to exist and function properly?

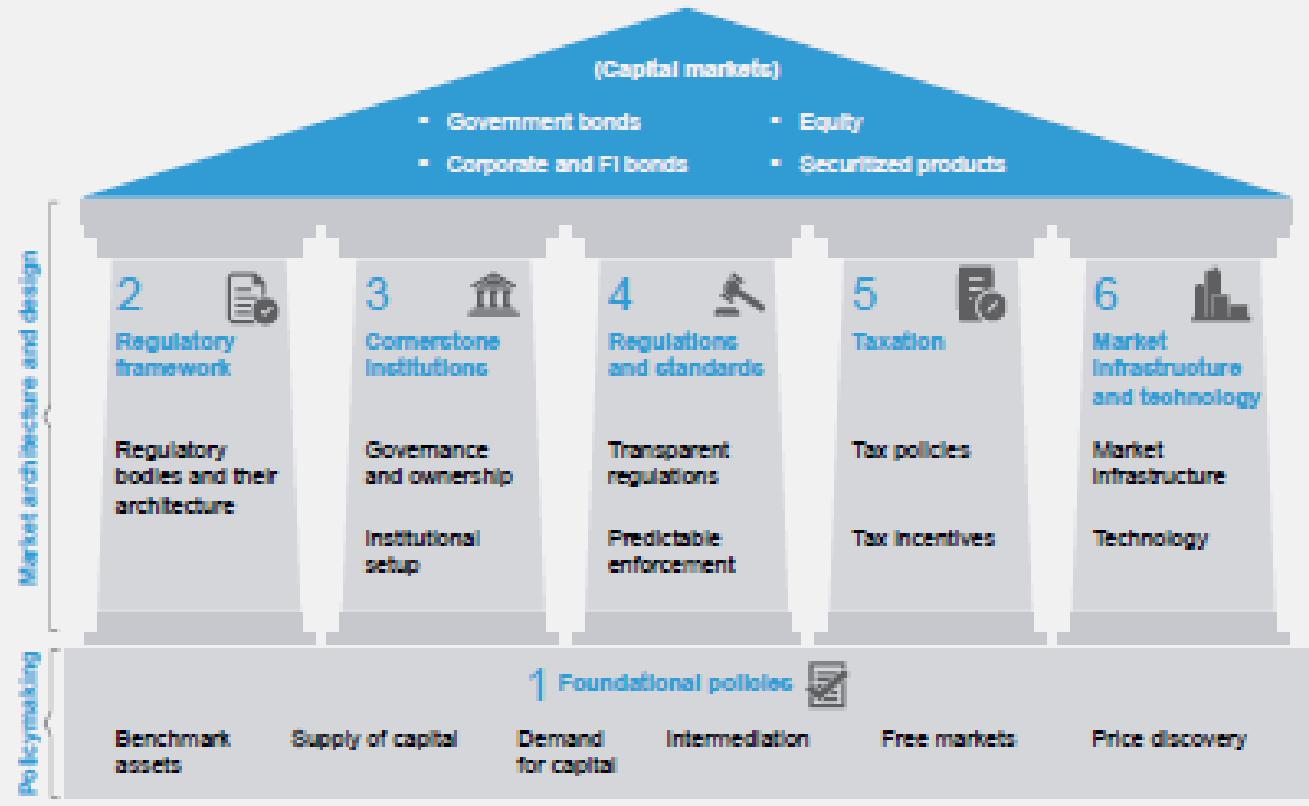


Financial Markets



Key building blocks for capital markets

The building blocks for sustaining long-term capital market growth



Source McKinsey April 2017

Functions of Financial Markets

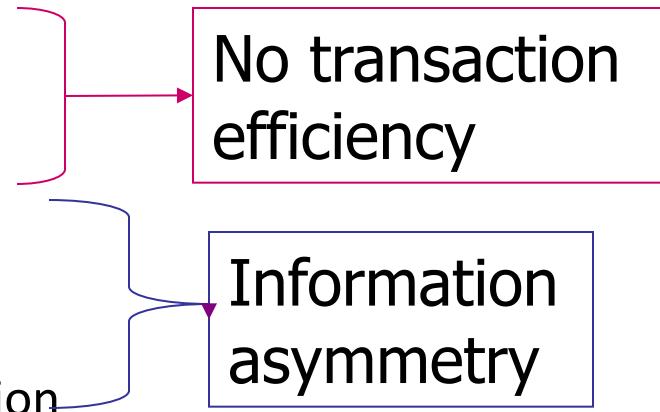
- Channeling funds
- Efficiency
- Price determination
- Risk sharing
- Liquidity
- Financial stability
- Information aggregation and coordination

Quick Search!

- Find a map of Asia

Asia's Financial Markets

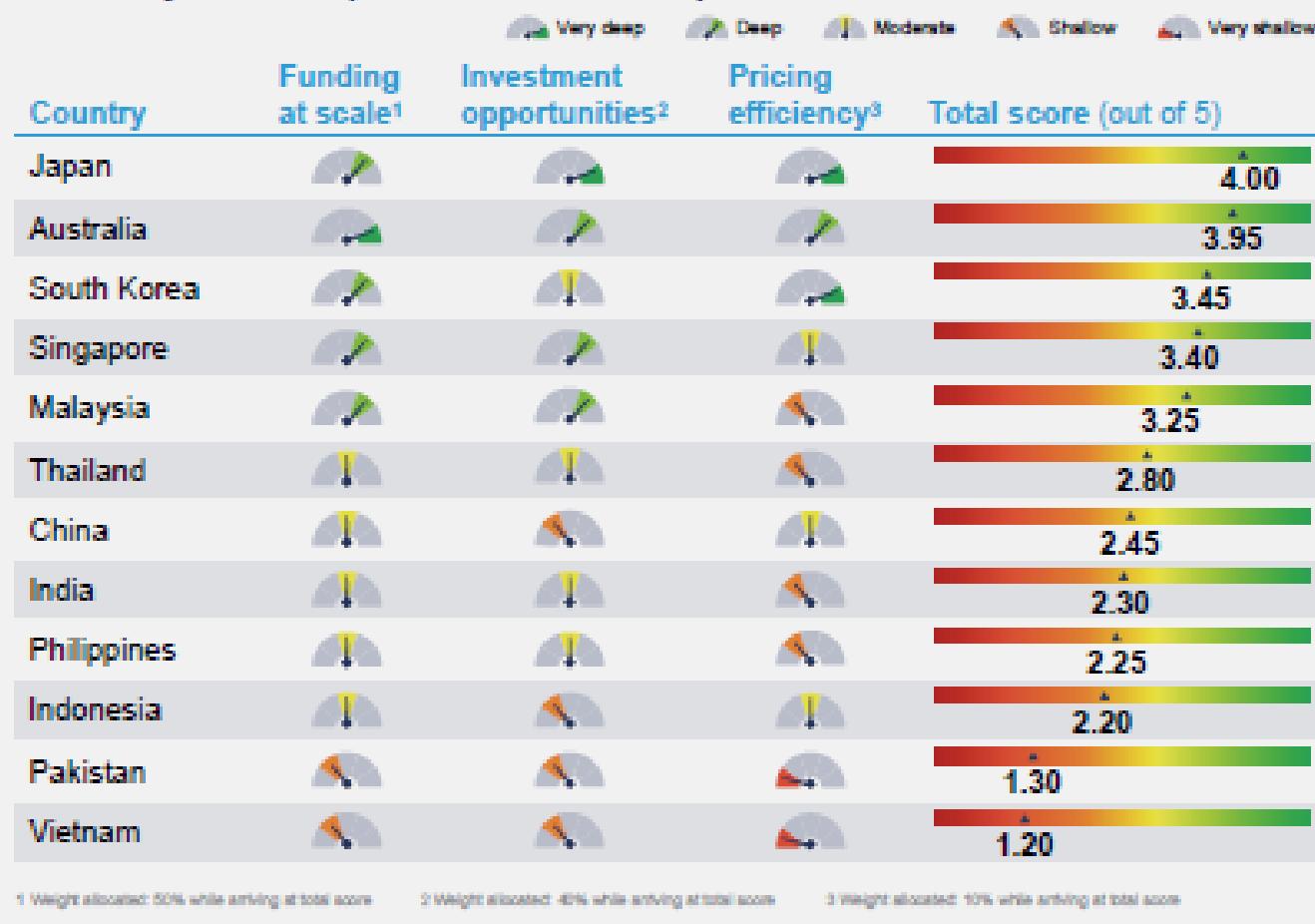
- Fragmented markets
- Lack of information
- Reliability of information
- Timeliness and accuracy of information
- Legal (un)certainty
- Weak regulators



Affects price efficiency

McKinsey Asian Capital Markets Development Index

McKinsey Asian Capital Markets Development Index



Source McKinsey April 2017

Constituents of the McKinsey ACMD Index

Constituents of McKinsey Asian Capital Markets Development Index

Theme	Sub-theme	Metric	Description
 Funding at scale	Availability	1 Financial depth of primary market	3-year average issuances of equity, government bonds (>1 year), corporate and FI bonds, and securitized products, as percent of GDP
		2 Availability of long-term debt	Ratio of long-term (>10 years) to short-term (1 to 3 years) debt issuances, vis-à-vis overall size of the debt market
	Diversity of sources	3 Availability and stability of foreign investment	Stock of Foreign Portfolio Investment (FPI) as percent of GDP, vis-à-vis 5-year standard deviation of FPI flows
	Affordability	4 Competitiveness of cost of capital	Cost of equity and debt adjusted for inflation
 Investment opportunities	Availability	5 Availability of investment opportunities across asset classes	Stock of all capital market assets (comprising outstanding equity, corporate and FI bonds, government bonds, and securitized products) as a percentage of GDP
	Return	6 Appropriate risk-adjusted returns	7-Year Sharpe ratio, 2008–2015, for investments in cash equity products
 Market efficiency	Pricing efficiency	7 Quality of pricing information	Efficiency index comprising: ¹ <ul style="list-style-type: none">Long-term memory/Hurst Exponent, measuring correlation in the long-term seriesFractal dimension, measuring correlation in shorter fractions of the earlier long-term seriesApproximate entropy, measuring the availability of information which can be used to predict market trends

¹ FINMAP: Financial Distortions and Macroeconomic Performance, Krugman and Voswinkel (2014)

Source McKinsey April 2017

Pop Quiz!

- When everything in a country is fully owned by the government, can there be an effective capital market?
- Why is climate change a risk factor for capital markets?
- What are some of the challenges investors face in frontier markets?

Course Map

Overview

- The Language of Business
- What is finance? Why do we need a financial system?
- **Who are the players?**
- How does it work?

The Players

- Sources of funds (Investors)
 - Institutionals
 - Sovereigns and quasi-sovereigns
 - Banks & FIs
 - Corporations
 - HNWI
 - Public (households)
- Users of funds (Issuers)
 - SSAs:
 - Supras
 - Sovereigns
 - Agencies
 - Banks
 - Corporations
 - SPVs

The Players

Warning! We will explain the difference between “intermediaries” and “financial intermediaries” later

■ Intermediaries

- Investment bankers
- Primary dealers/traders
- Brokers
- Credit and liquidity enhancers

■ Other actors

- Regulators
- Service providers
- Rating agencies

Class discussion

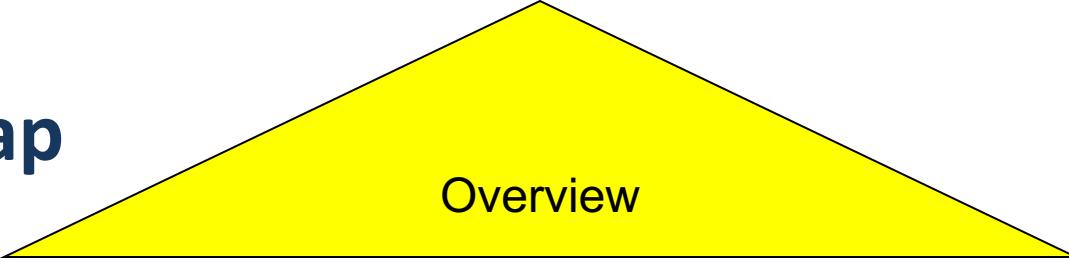
- What are the objectives and incentives of each of the categories of players in the markets?



“Incentives are the cornerstone of modern life and understanding them - or, often, ferreting them out - is the key to solving just about any riddle, from violent crime to sports cheating to online dating.”

Steven Levitt/Stephen Dubner, Freakonomics

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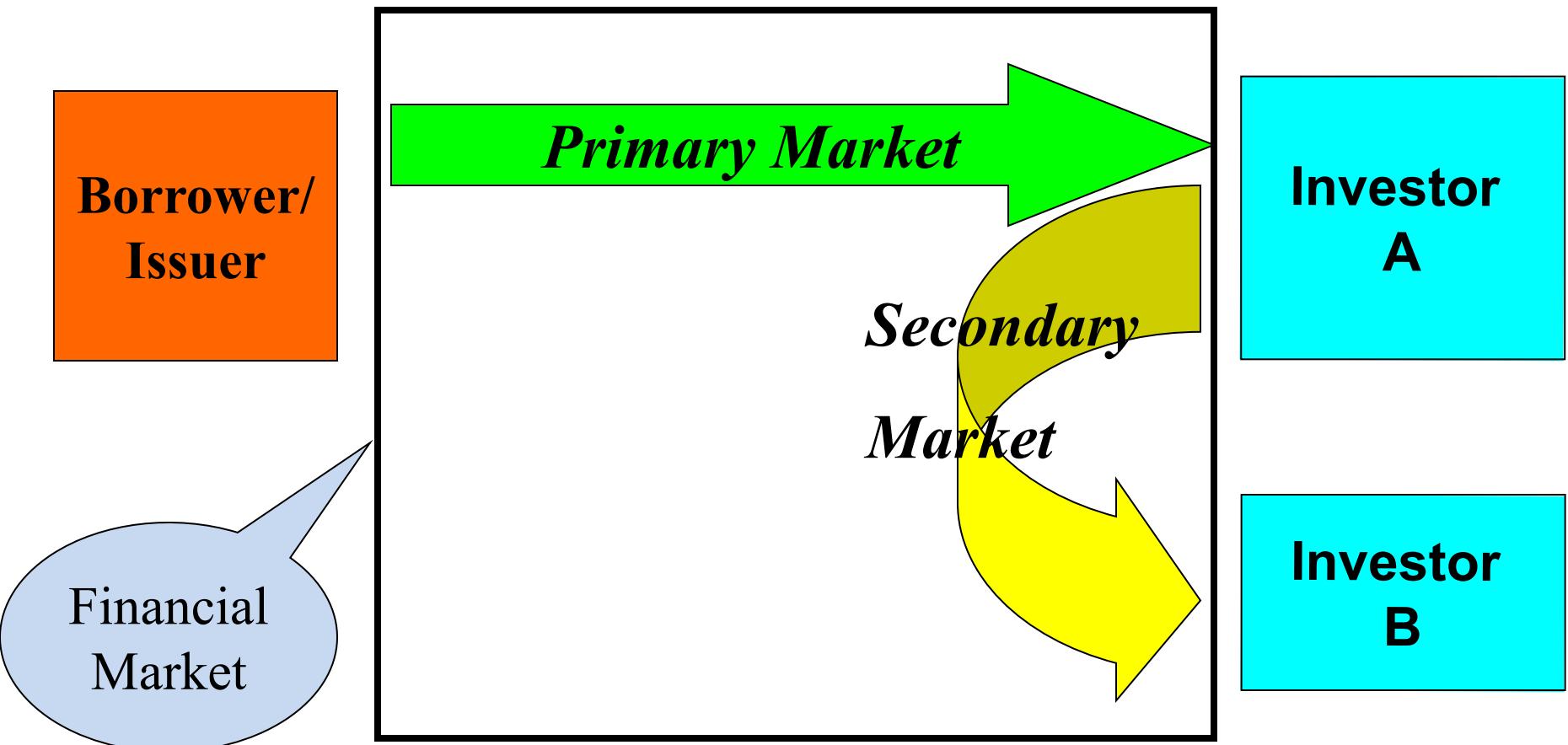
Classification of Financial Markets

- Primary v. Secondary
- Debt v. Equity
- Exchanges v. OTC
- Domestic v. International
- Public v. Private
-

Primary & Secondary Markets

- Primary market = raising money/capital for the **first** time
- Secondary market = selling securities onto another investor

Primary v. Secondary Markets



Test Your Understanding/PRS time!

- Is an IPO (initial public offering) a **primary** market or **secondary** market transaction?
 - Primary
 - Secondary
- If you buy shares from another investor, is it **primary** market or **secondary** market transaction?
 - Primary
 - Secondary



Debt v. Equity

■ Debt

- Legally binding obligation
- No voting rights
- Requires repayment of principal and interest
- Interest is tax-deductible (some countries inc. US, but not always)
- Covenants can be restrictive

■ Equity

- Ownership
- Voting rights on common stock
- Dividends on common stock are optional
- Dividends are paid from after-tax profits
- All cumulative preferred dividends must be paid before dividends paid on common stock

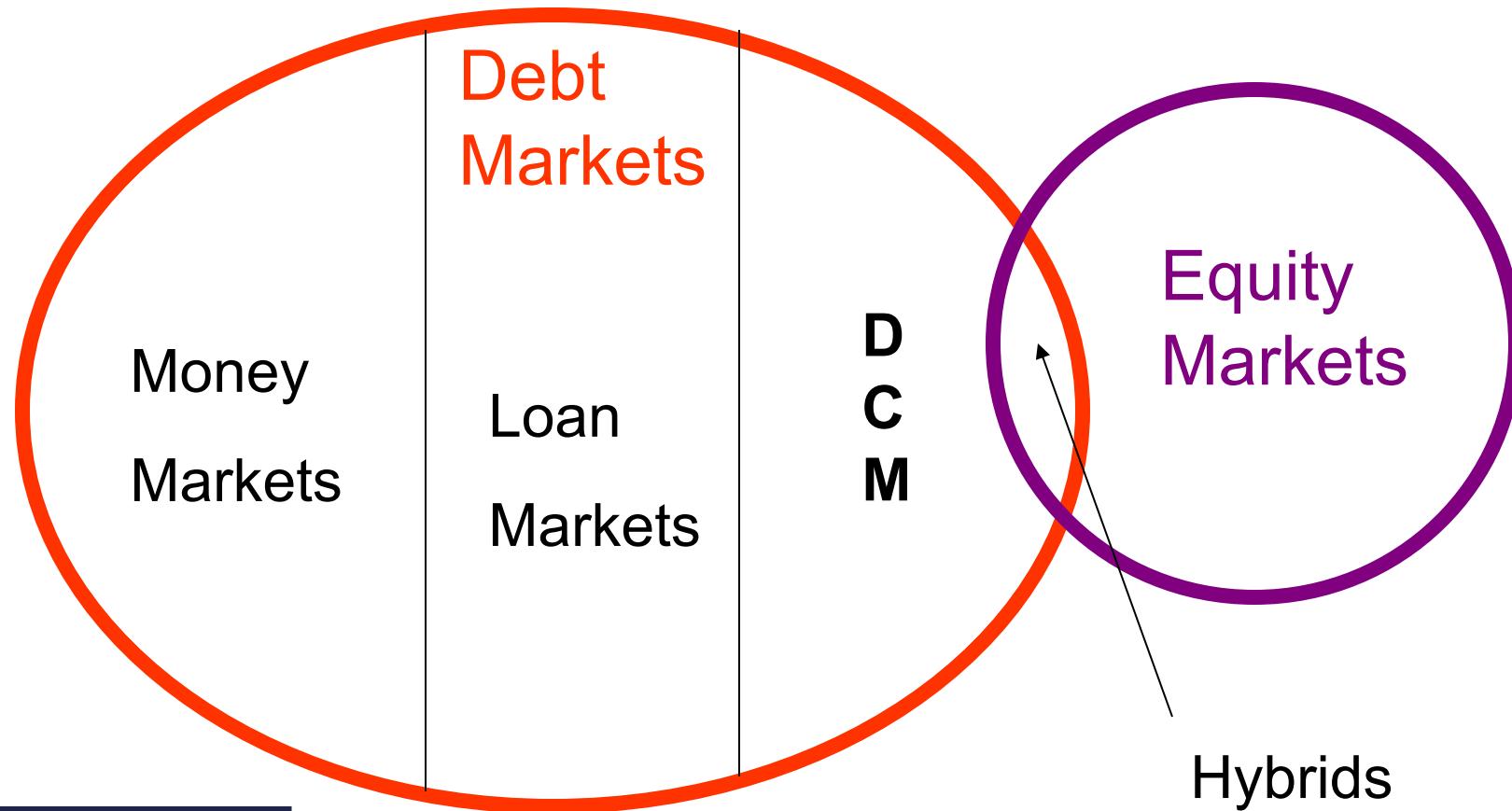


The conditions in
the contract

Securities & Capital Markets

- Securities = negotiable, tradable financial instruments
 - Include equity securities (stocks/shares) and debt securities (bonds/notes)
- Capital markets = markets where securities are traded and where firms can raise capital (either equity capital or debt capital)
 - Include Equity Capital Markets (ECM) and Debt Capital Markets (DCM)
- Financial markets include but are not limited to, capital markets. For example:
 - Foreign Exchange (FX) market (market for trading currencies) – the largest and most liquid of all financial markets, is not a “capital market” since participants don’t raise capital
 - Commodities market
 - Loan market
 - Money market (interbank, commercial paper, CDs...)
 - Derivatives market

Debt v. Equity Markets



Test Your Understanding/PRS time!

- If a company issues bonds, which type of market does it use?
 - ECM
 - DCM
- The FX market is a
 - Capital market
 - Financial market



Market Organization

4 main types of market organization:

- Direct search
- Brokered market
- Dealer market
- Auction market

Methods of Price Determination

- **Dealer markets:** Price determined by market makers (traders/dealers)
based on supply/demand; their existing position; their view of the market
- **Broker markets:** Price determined by supply/demand
- **Auction markets:** All bids and offers entered into system; price
determined at equilibrium point (Dutch auction) or highest price bid

Some exchanges are auction markets while others are dealer markets

Exchanges vs. Over-the-Counter (OTC)

Exchanges

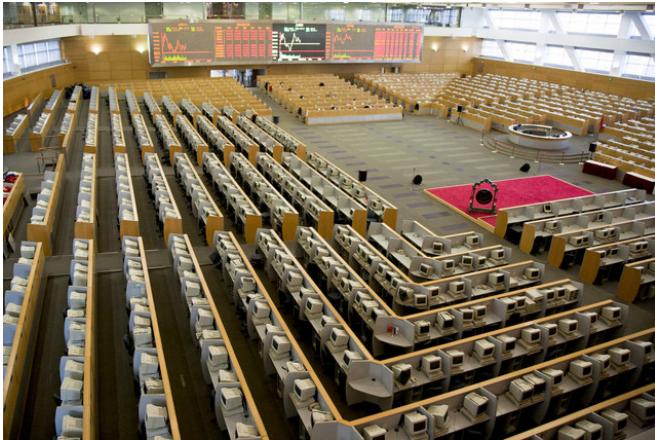
- One centralized “location”
- 2 types: stock exchanges and derivatives exchanges
- Can be auction markets or dealer markets

Over-the-counter (OTC)

- Not localized
- Dealer markets
- Examples: bond market

Game: Identify these Asian securities exchanges

1



3



2



4



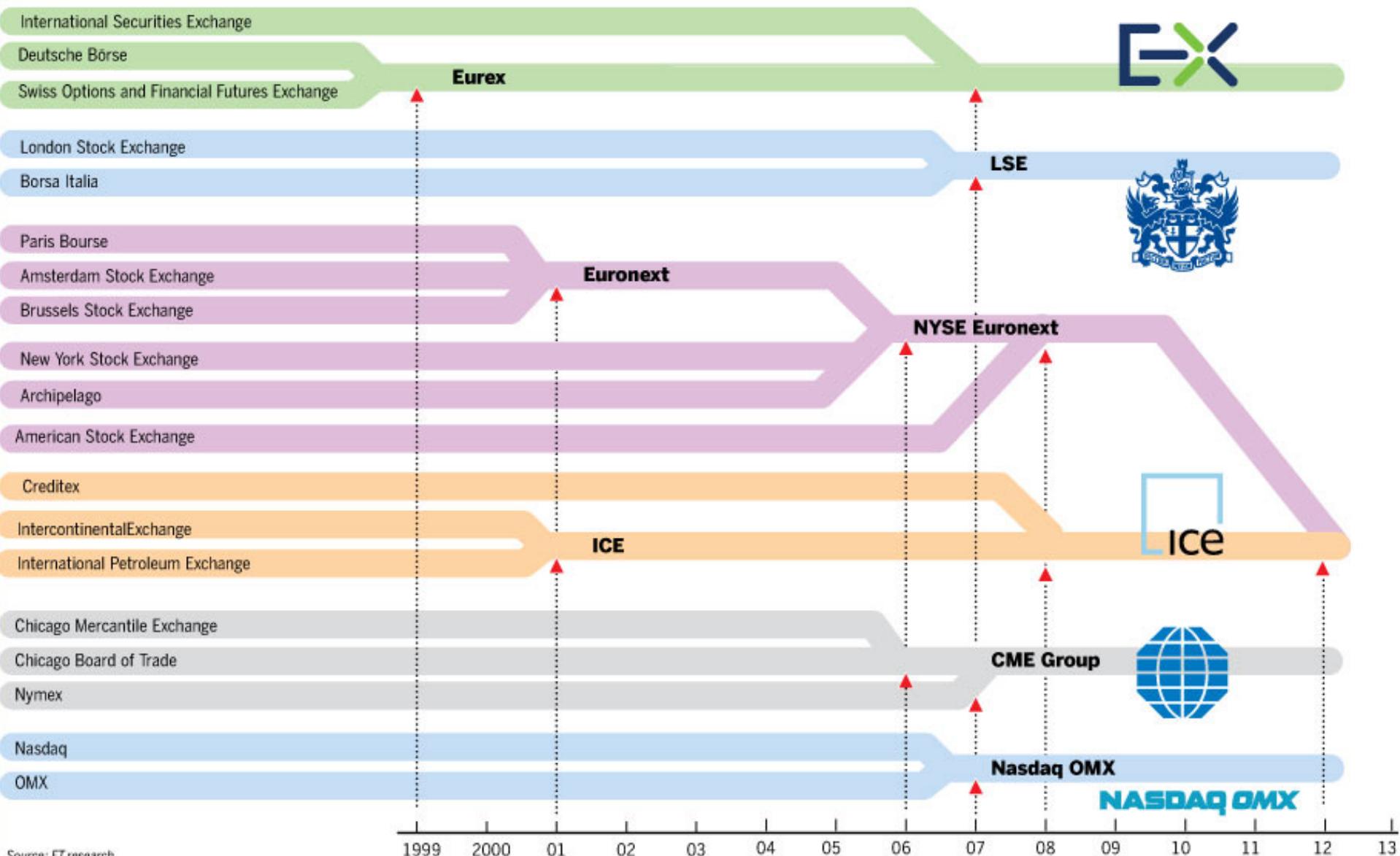
Some misunderstandings

- Trading v. listing: financial instruments can be **listed** on an exchange ...
 - to **list** a security or a financial instrument on an exchange, the firm needs to meet the listing requirements and rules of that particular exchange
- ... But don't necessarily **trade** on that exchange
 - Trading has to do with supply and demand for that particular instrument
 - A stock can be listed on an exchange but very rarely trade on it if there is no or limited liquidity
- Some financial instruments ONLY trade on exchanges
 - for example **futures** are exchange specific financial instruments
- Others can be traded on exchanges or OTC
 - for example bonds are often listed on exchanges but generally trade OTC.
 - Spot FX only trades OTC

Current issues related to market organization

- The advent of electronic trading
- Will open outcry disappear?
- Demutualization and listing of exchanges
- Mergers and consolidation
- Dark pools and private exchanges
- Advent of High Frequency Trading (HFT)
- Regulators push to move OTC onto exchanges





Source: FT research

Test Your Understanding

- Futures are traded on
 - Exchange markets
 - OTC markets

- FX is traded on
 - Exchange markets
 - OTC markets



Domestic, Euro and Foreign markets

- To determine if a securities issue is domestic, foreign or “Euro” we need to check three key variables:
 - what currency is the security issued in?
 - Where is the security placed? (where are the investors)
 - Where is the issuer?
- Domestic issues: placed with investors in the country of the currency and the issuer is also from the country of the currency
 - Example: HK Land issues a HKD bond placed to HK investors

Domestic, Euro and Foreign markets

- Foreign issues: placed with investors in the country of the currency but the issuer is from a different country
 - Example: HK Land issues USD bond to US investors
- “Euro” issues: placed with investors outside the country of the currency. It doesn’t matter where the issuer is from.
- WARNING!! Very confusing as “Euro” here is NOT the Euro currency.“Euro” here means the currency is used OUTSIDE its country.
 - Example 1: HK Land issues a EUR denominated bond to HK investors
 - Example 2: HK Land issues a USD denominated bond to EU investors

BIS Classification of Bond Markets

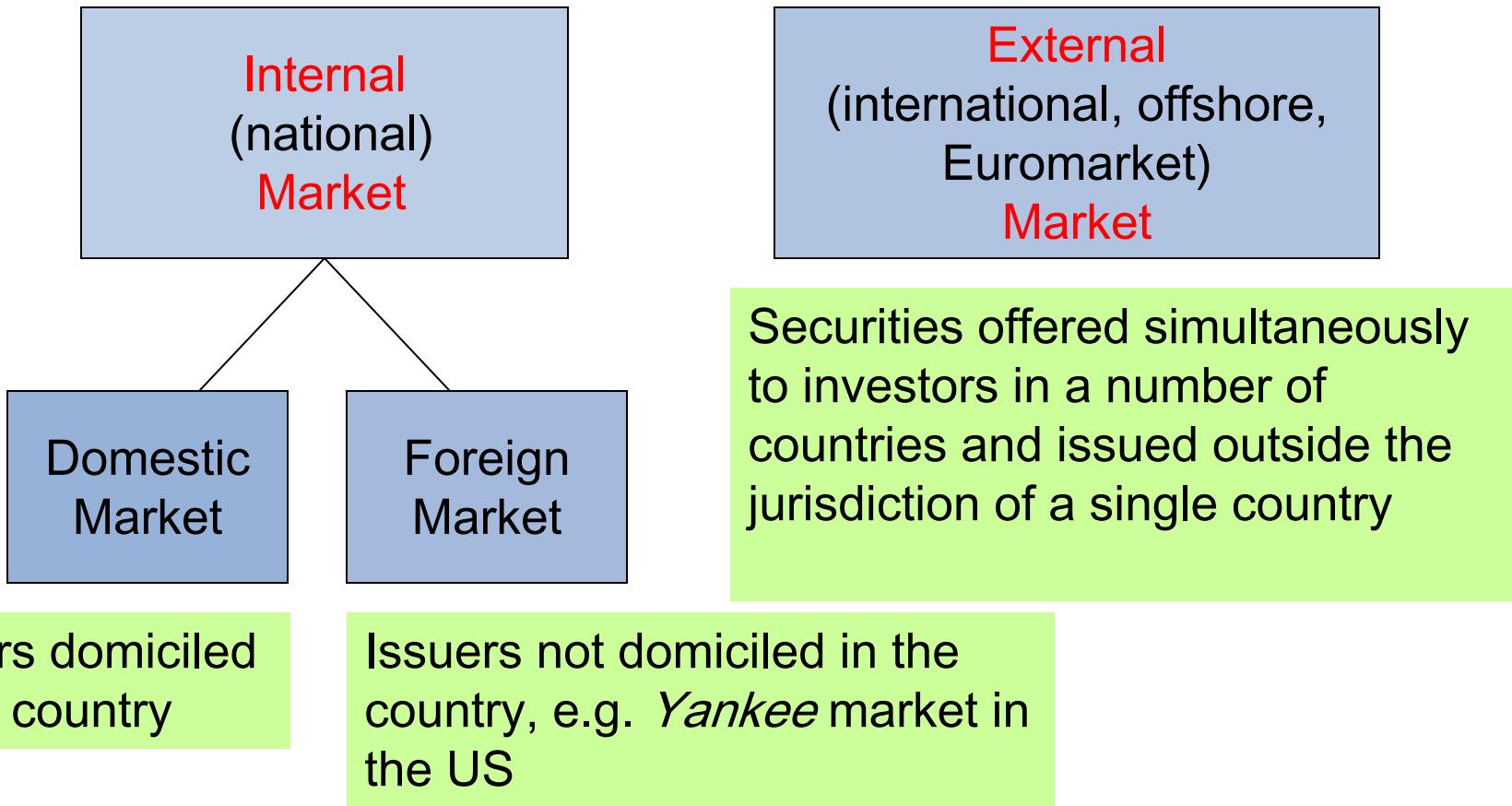
For the BIS, securities issues are classified as domestic or international. The international category includes foreign and “euro” issues.

Classification of BIS securities statistics

	Issues by residents	Issues by non-residents
In domestic currency		
Targeted at resident investors	Domestic	International (foreign: yankee, samurai, bulldog)
Targeted at non-resident investors	International (offshore or euromarket)	International (offshore or euromarket)
In foreign currency	International	International

Source: BIS (2003a), p 14.

Internal v. External classification



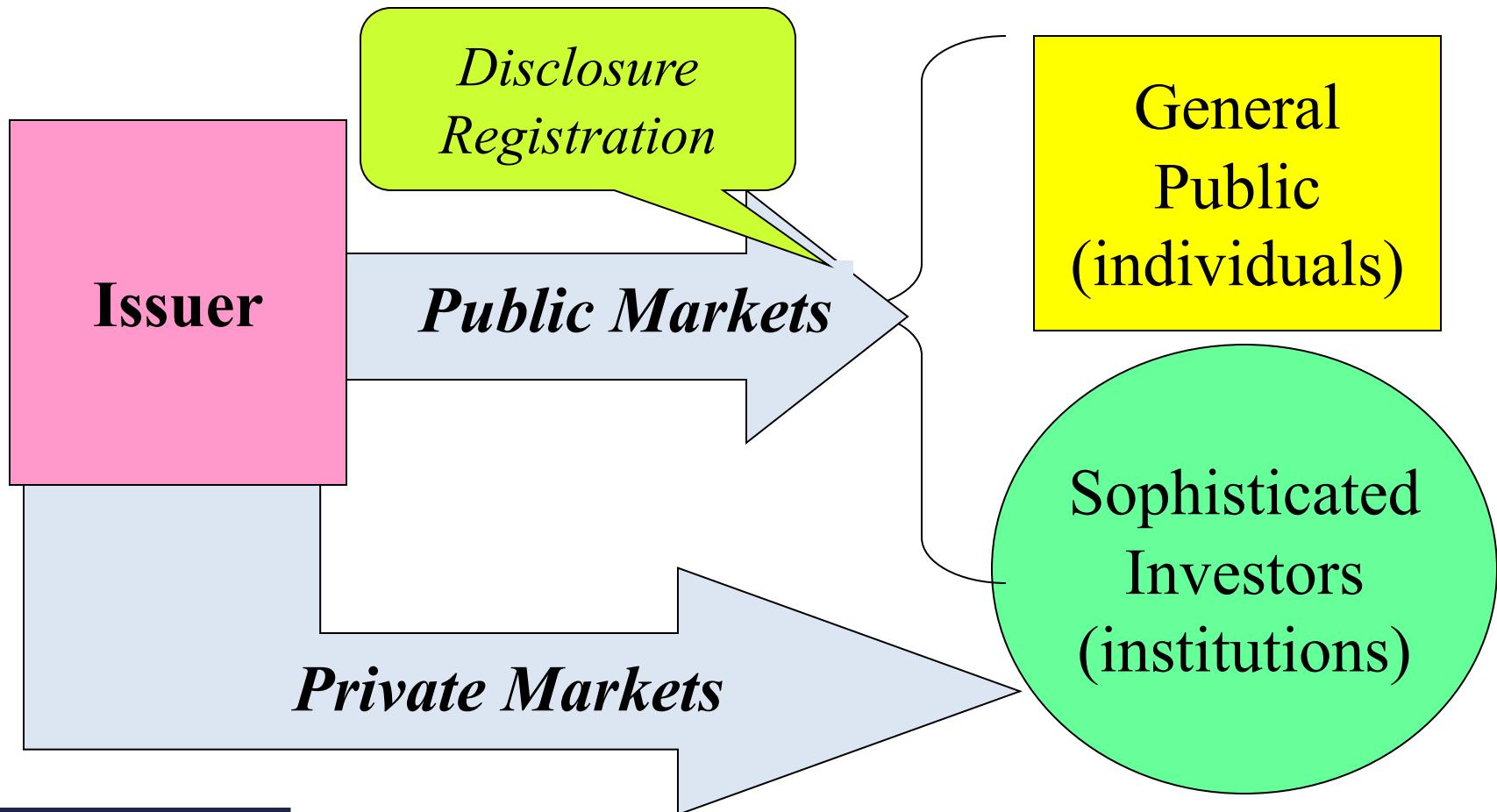
Source: Fabozzi/Modigliani "Capital Markets: Institutions and Instruments" 1996

Test Your Understanding

- HK Land issues a HKD bond to HK investors. This is a:
 - Domestic issue
 - Euro issue
 - Foreign issue
- BIS records the issue as a:
 - domestic securities issue
 - International securities issue
- This issue was done in an
 - Internal market
 - External market



Private v. Public



Public Issues

- Targeted at the general public (also called “retail” issues)
- Subject to regulatory control
- Typically underwritten by an investment bank
- Typically require
 - Registration/filing
 - Disclosure (prospectus) + due diligence
 - Rating (in some countries)
 - In some countries there may be a need for prior approval from regulator (e.g. PRC) and a queuing system

Private Issues (Private Placements)

- Targeted at “sophisticated investors” or QIBs
- Typically exempted from registration requirements (in the US various exemptions may apply depending on the nature of the issue e.g. rule 144A)
- Lower standards of disclosure and due diligence as investors are deemed “sophisticated”
- Generally no need for underwriting

Test Your Understanding

- HK Land issues a HKD bond to HK investors. The placing banks are targeting individual investors in HK. This is a:
 - Public issue
 - Private issue
- The MTRC places a USD bond with sophisticated investors in the US under rule 144A. This is a:
 - Public issue
 - Private issue

