FIN2010 Financial Management The Role of Financial Management



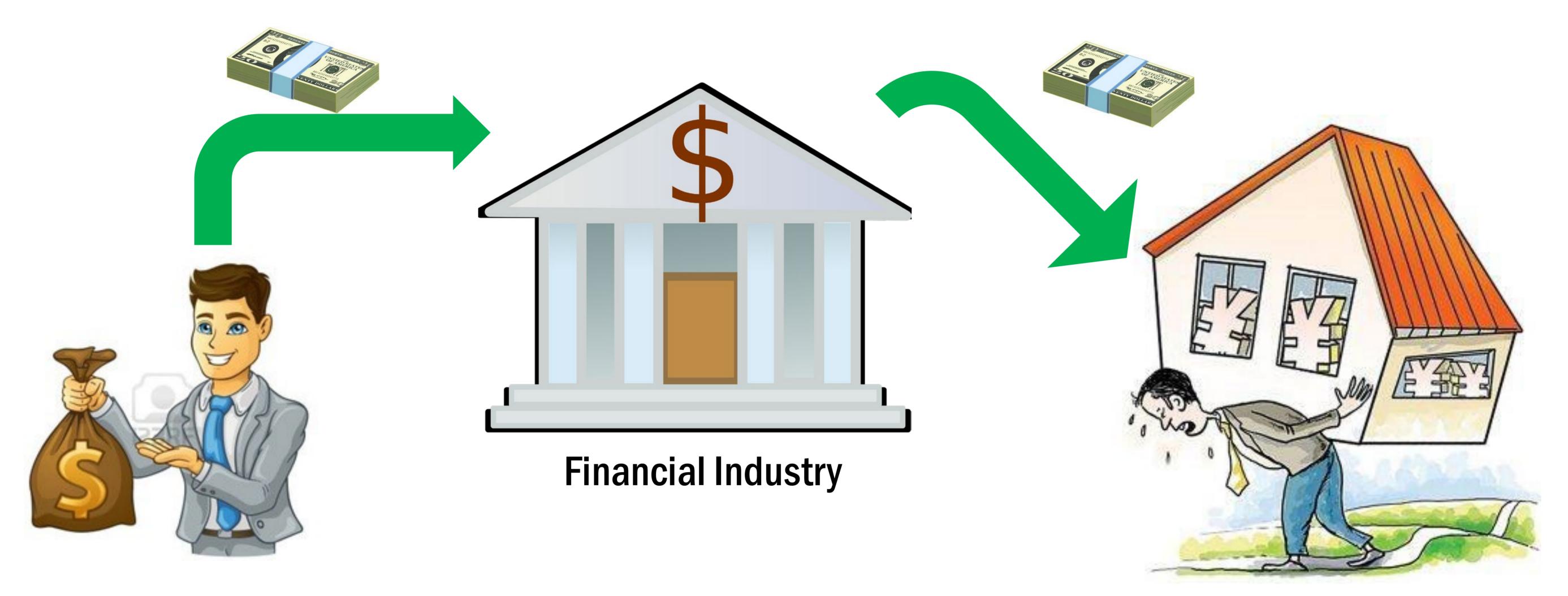
Agenda

- What is finance?
 - Investors and borrowers
 - Financial institutions
- Plan for the semester

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What is Finance?



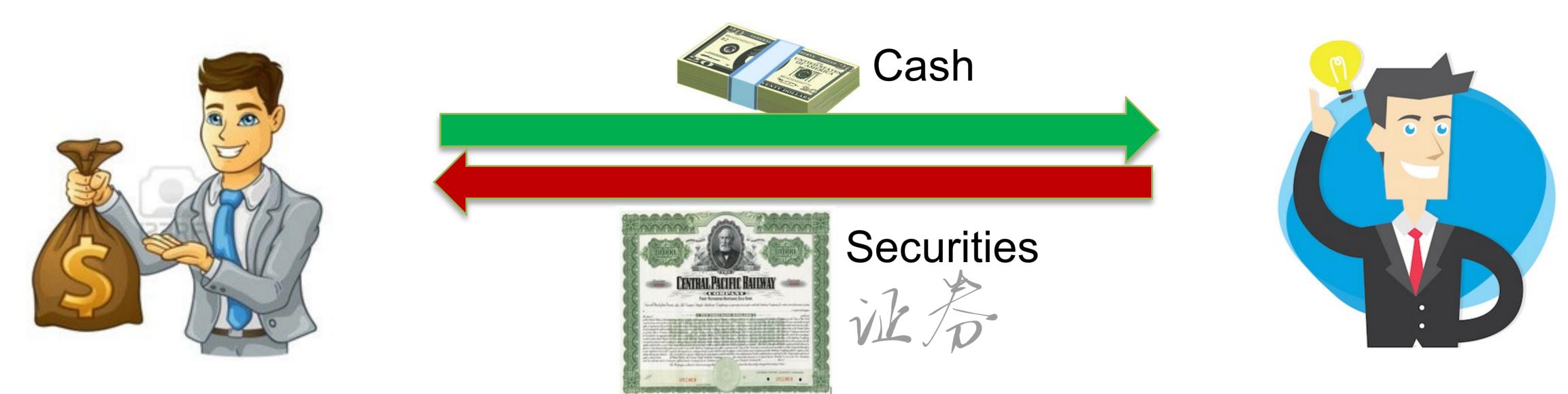
Investors who have money

Borrowers who need money

Does Financial Industry Create Value?

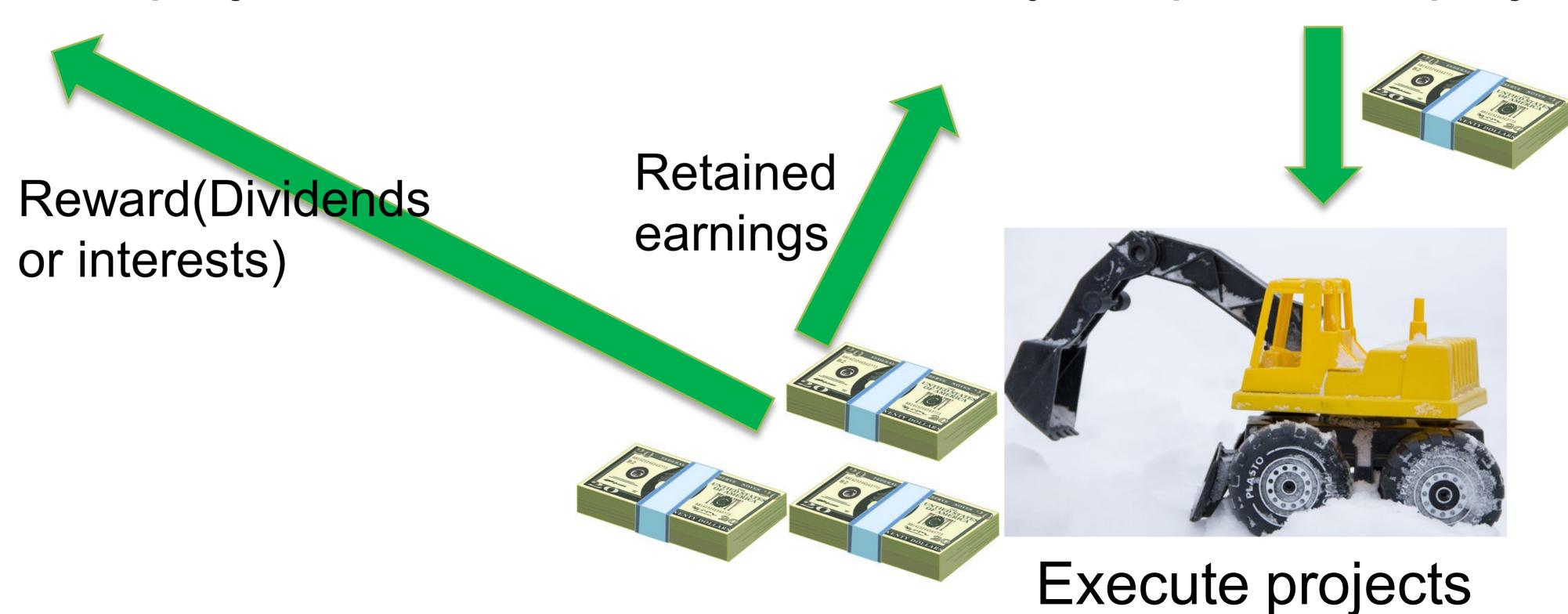
- It seems the financial industry only transfers wealth but does not create wealth. Is this true?
 - No! Efficient allocation of resource is in itself valuecreating
 - Suppose there are two firms:
 - Firm A can turn \$1 to \$2 in a year
 - Firm B can turn \$1 to \$1.1 in a year
 - If we have \$100 to allocate to the two firms.
 - An economy with efficient financial industry will allocate all \$100 to firm A. A year later the society has \$200
 - 2. An economy with *in*efficient financial industry may allocate \$50 to each firm. A year later the society has \$155

How does Finance Create Value?



Investor who has money, but does not have profitable projects

Borrowers who need money to carry out profitable projects



Why do We Need the Middleman?



100 Investors

10 Borrowers

- Without a middleman, # of negotiations: 1000
 With a middleman, # of negotiations: 110
- The middleman provides useful service
 - Due diligence (collect info on borrowers)
 - Risk sharing, diversification, liquidity
 - Advisory
 - Monitoring

— reduces search costs!

Who are the Investors?

Anyone or any institutions that have extra money!

Invest directly







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Institu

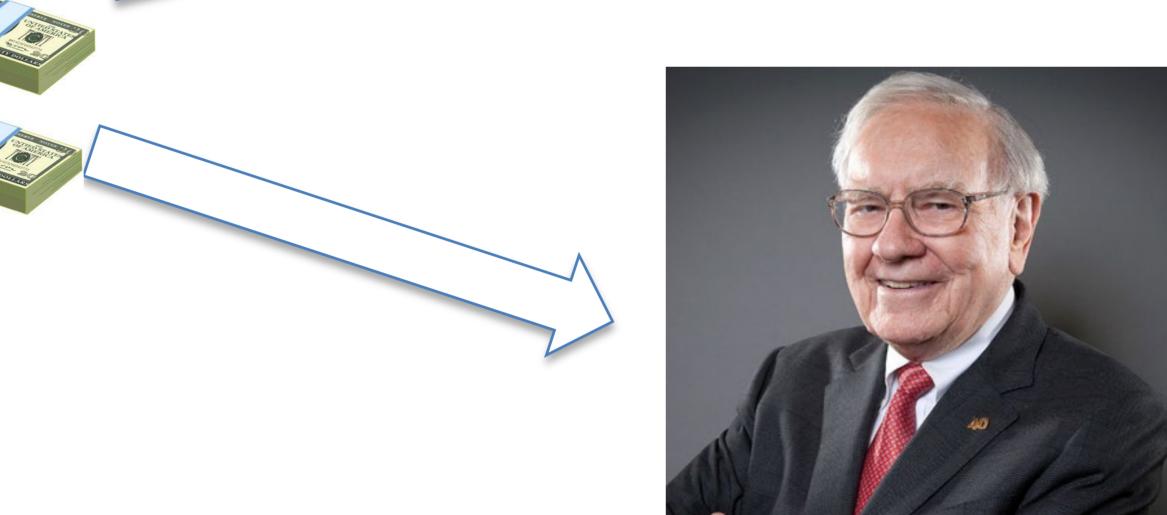




Endowments Sovereign Funds 2 Firms



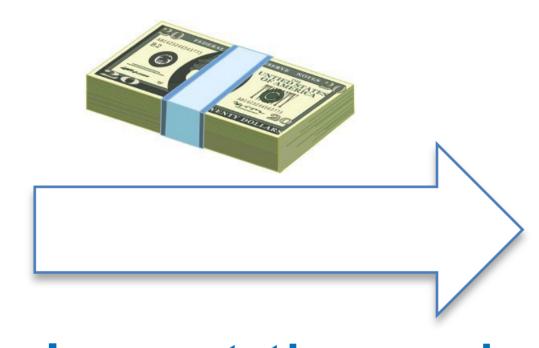
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- Mutual funds
- Hedge funds
- Venture capitals
- Private equities





Invest through managers

Pension Funds

Country	Fund	Assets (in billions)
United States	Federal Old-age and Survivors Insurance Trust Fund (Social Security)	\$2,619
Australia	Australian National Superannuation Scheme	\$2,568
Japan	Government Pension Investment Fund	\$1,790
Norway	Government Pension Fund of Norway	\$1,356
United States	Military Retirement Fund	\$1,178
United States	Civil Service Retirement and Disability Fund	\$1,003
United States	Thrift Savings Plan (TSP)	\$822
Canada	Canada Pension Plan and CPP Investment Board(CPPIB)	\$570
Netherlands	Stichting Pensioenfonds ABP (ABP)	\$498
South Korea	National Pension Service (NPS)	\$462
China	National Social Security Fund	\$405

Source: Wikipedia, National Council for Social Security Fund, as of 2022

Model: Take monthly contribution from young people; pay back (more) when they get old Investment Goal: (1) Meet future obligations (2) Maximize return

Global Money Management Firms

Rank	Company	Country of Origin	AUM (US\$ Billion)
1	BlackRock	United States	9,090
2	Vanguard Group	United States	7,600
3	Fidelity Investments	United States	4,240
4	UBS Group	Switzerland	3,960
5	State Street Global Advisers	United States	3,600
6	Morgan Stanley	United States	3,131
7	JPMorgan Chase	United States	3,006
8	Goldman Sachs	United States	2,672
9	Credit Agricole	France	2,660
10	Allianz Group	Germany	2,364

Source: ADV RATINGS, as of 2023

Model: Invest other people's money and earn management fees (typically 0.1 to 1% of AUM). Investment Goal: Maximize AUM by delivering what investors want and outperforming competitors

AUM: asset under management.

Who are the Borrowers?

Anyone or any institutions that need money!

Government

	Central Gov.	Local Gov.	GDP
US	\$33.2 T	\$4.0 T	\$25.5 T
China	\$25.8 T	\$35.0 T	\$18.0 T

Business

	Equity	Bond
US	\$46.2 T	\$10.4 T
China	\$10.7 T	\$29.8 T

Household

	Home Loan	Auto Loan
US	\$17.3 T	\$1.6T
China	\$7.5 T	\$0.03T

^{*} As of the end of 2022.







Who are the Middlemen?

Financial Industry

Borrowers

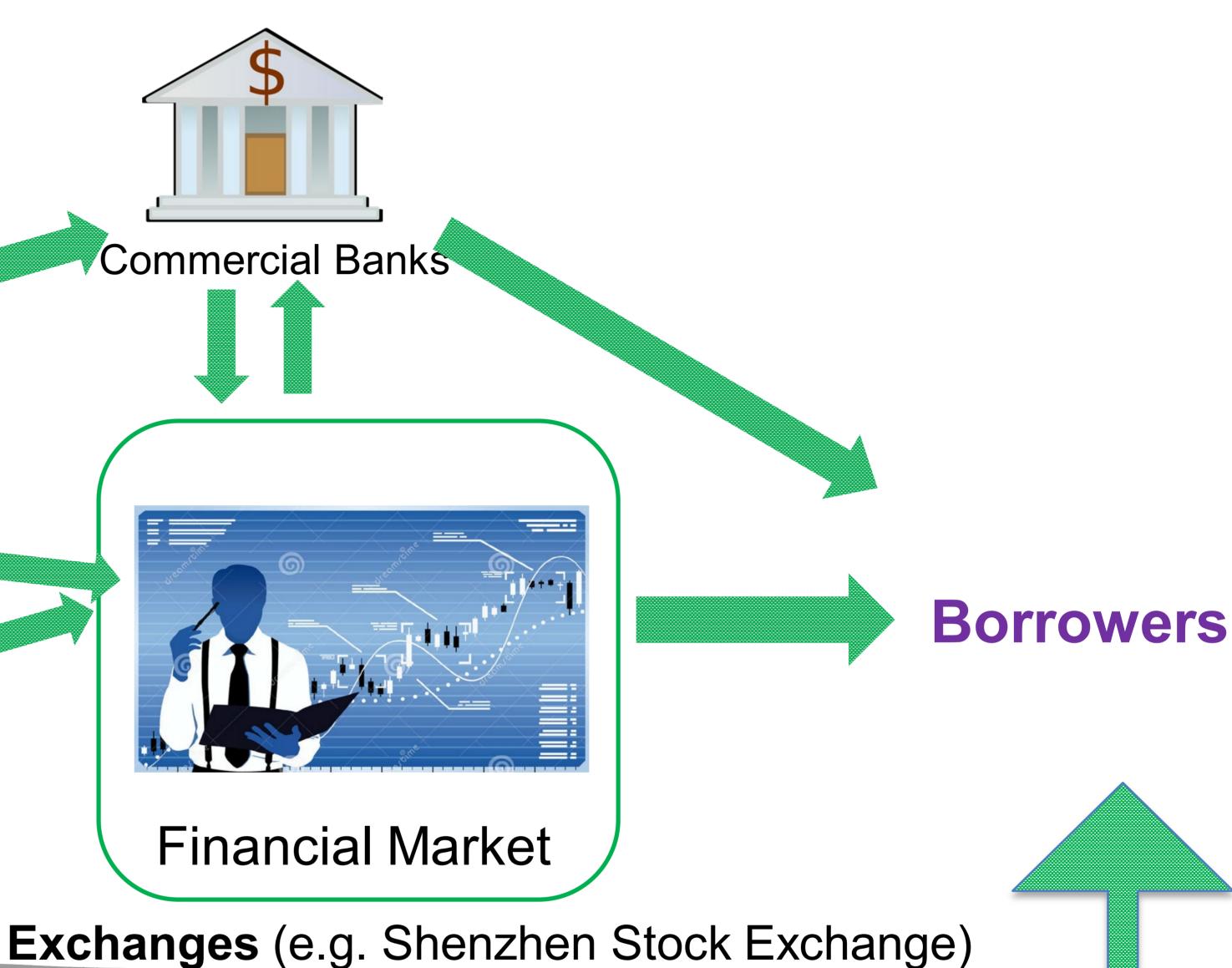
Investors

Who are the Middlemen?





Buy Side (Have money)



Sell Side Brokerage firms (e.g. CMSC (招商证券))

(Offer service) Data vendors (e.g. Wind, Bloomberg)

What Securities do They Play with?

Products in the financial markets are called securities.

- Equity instrument



- Simple Debt Instruments
 - Bond
 - Mortgage
- Derivatives
 - Forward and Future (transaction to be made in the future)
 - Option (right to execute a transaction in the future)
 - Swap (exchange of two cash flows)

Jobs—Buy Side Institutions



Individuals



Institutions

Tasks

- Manage cash flows to meet future obligations
- Manage risks of investments

 Banks

 Identify good money managers to delegate the investments to

Good

- Light workload/working hours
- Have power so everyone respects you



Borrowers usually not as high as sell side institutions and limited

o grow

get in (may require connection)
Financial Markets

Money Managers

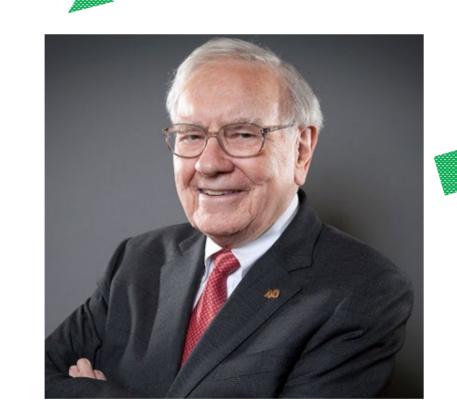
Jobs-Money Managers



Individuals



Institutions



Money Managers

Tasks

- Generate superior investment performance
 - Quantitative models
 - Fundamental analysis
- Convince investors to put money into your fund (build trust)

Good

- Extremely high pay (if you perform well)
- Everyone around you is smart

Bad

Can be stressful because pay is usually tied to performance

BrokeCan be fired easily

Financial Markets

Borrowers

Jobs-Banks

Commercial Banking



depositors

ins to borrowers

Selfwestment producte to investment all king earn incentive

Manage risk

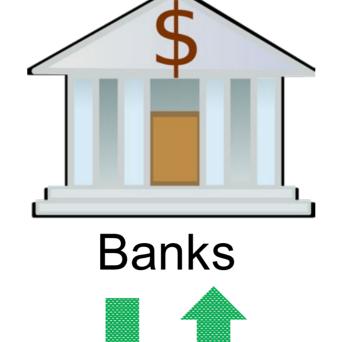
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Have many dif Institutions SWITCH Jobs



Bad

- Pay is usually not might
- Can be boring



Tasks

Primary market: help companies finance (IPO,

dging needs

Borrowers

Tradir





- Able to meet with important people
- Good exit options

Bad

- Extremely long working hours
- Sometimes toxic working environment

Jobs—Other Institutions

Brokerage Firms

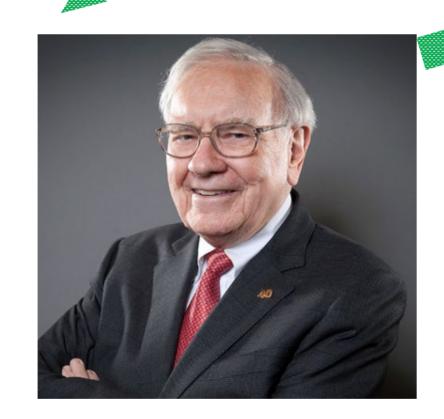
- Help clients access the financial markets
 - Technology

Individua **Sompliance**

- Execution
- Provide market research



Institutions



Money Managers



Brokers

Data Vendors

Provide data to other participants

Exchanges

- Technology platform
- Answer to regulators



Borrowers

Market makers

- Maintain market liquidity
- Arbitrageurs
- Correct mispricing

Do you now understand what is going on in these news?

- https://www.ft.com/content/ab3067cf-c885-4c7c-81bb-30ead3bb94d6
- https://www.ft.com/content/3b567d41-e940-4524-8277-8e3ac14edc31
- https://www.ft.com/content/994e592c-adcc-4c6b-b45a-18056cb548c0

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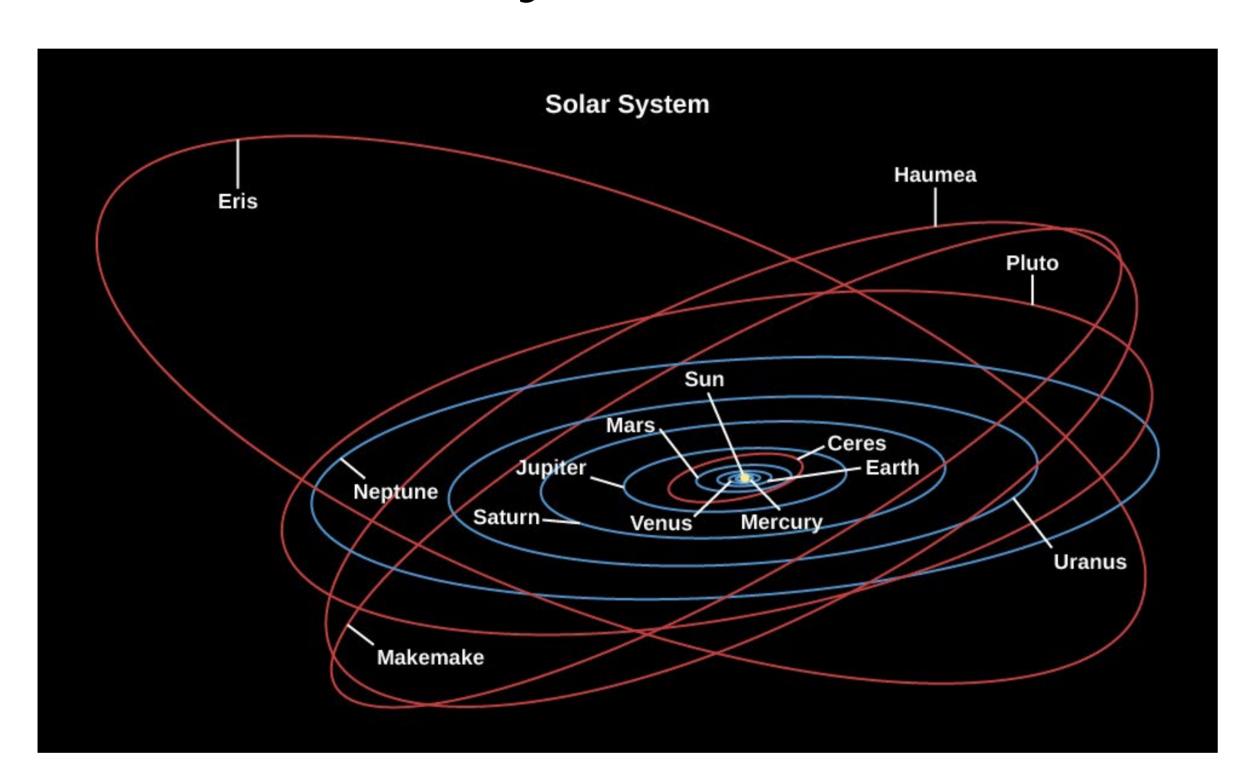
Plan for this Semester

- Basic tools
 - Time value of money, institutional knowledge
- Investors' problems
 - Asset valuation
 - Risk and Return
- Optional topics
 - Personal investment
 - Financial Derivatives
- Midterm
- Corporates' problems
 - Project valuation
 - Raising capital
- Optional topics
- Final



Setting the Correct Expectation

Social science, unlike natural science, cannot accurately describe the world.





Then why do we learn this?

- It is vastly better than pure guess.
- You need to learn the primitive models first so that you can develop more advanced models in the future.

Summary

- What is finance?
- Who are the investors and borrowers?
 - Investors: individuals and institutions
 - Borrowers: government, corporate, individual
- What value does the financial industry create?
 - Help allocate resource efficiently
 - Reduce searching and provide services
- What does the industry consist of?
 - Commercial banks
 - Buy side institutions and money managers
 - Brokers, investment banks, data vendors, exchanges, and many others