

2604697 Financial Markets, Institutions, and Instruments

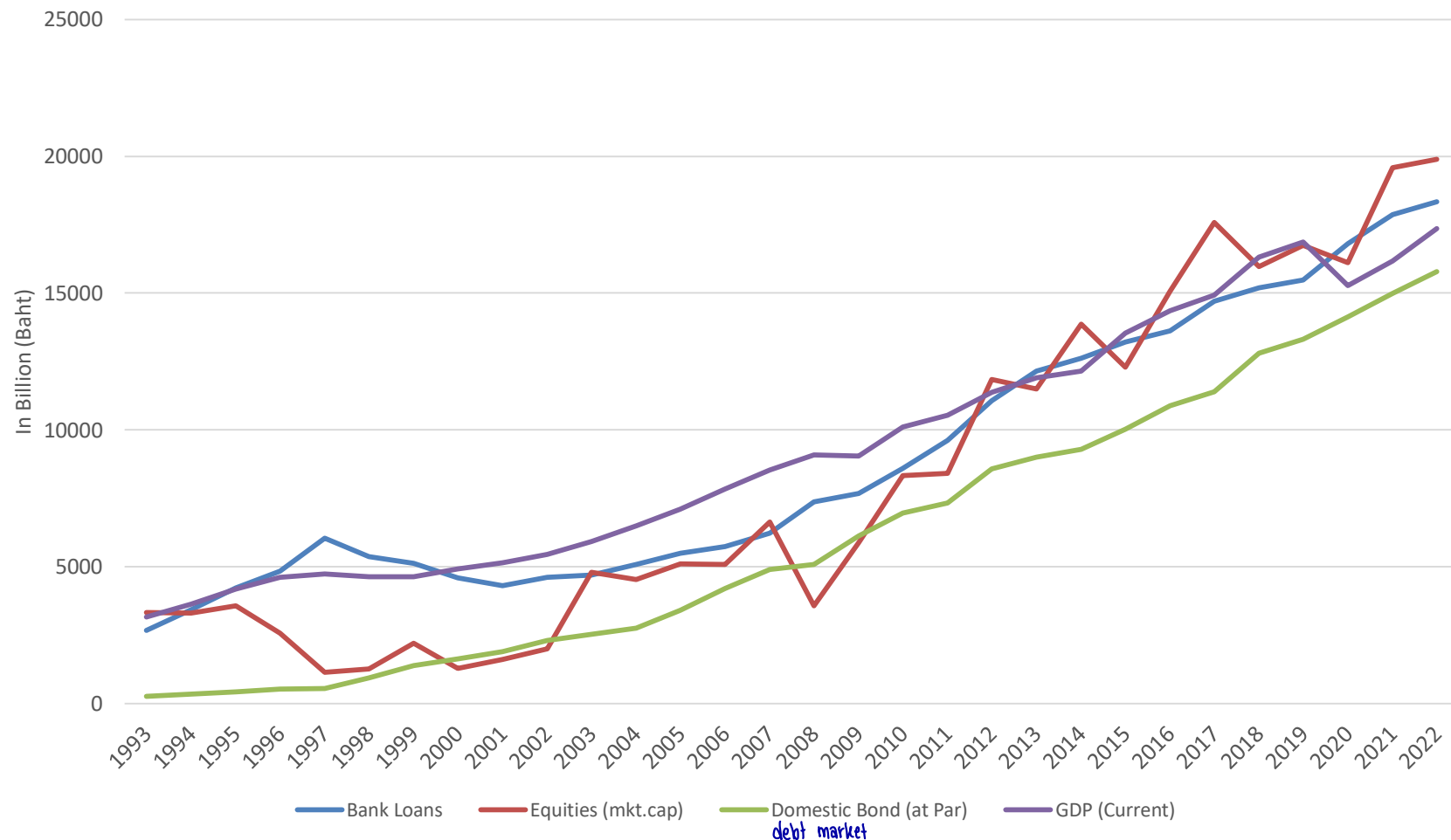
Why Study Financial Markets?

Financial markets are crucial in our economy.

1. Help channel funds from savers to investors, promoting economic efficiency.
 2. Promote personal wealth, business firms, and economy through market activities
- Well functioning financial markets are key factors in producing high economic growth. We will briefly examine each of these markets, key statistics, and how they function throughout this course.

Size of Thai Financial Markets

↳ go up along with increase in GDP



Source: <http://www.thaibma.or.th/EN/Market/SummaryStatistics.aspx>

Questions

- What are primary form of financing? ^{↗ fund moved}
- What are advantages/disadvantages of each type of financing?
- What are risks involved in financial markets and financial intermediaries

Overview of Financial System

- Suppose you want to start a business manufacturing a household cleaning robot, but you have no funds.
- At the same time, John has some money he wishes to invest for his retirement.
- If the two of you could get together, perhaps both of your needs can be met. But how does that happen?

Overview of Financial System



Overview of Financial System

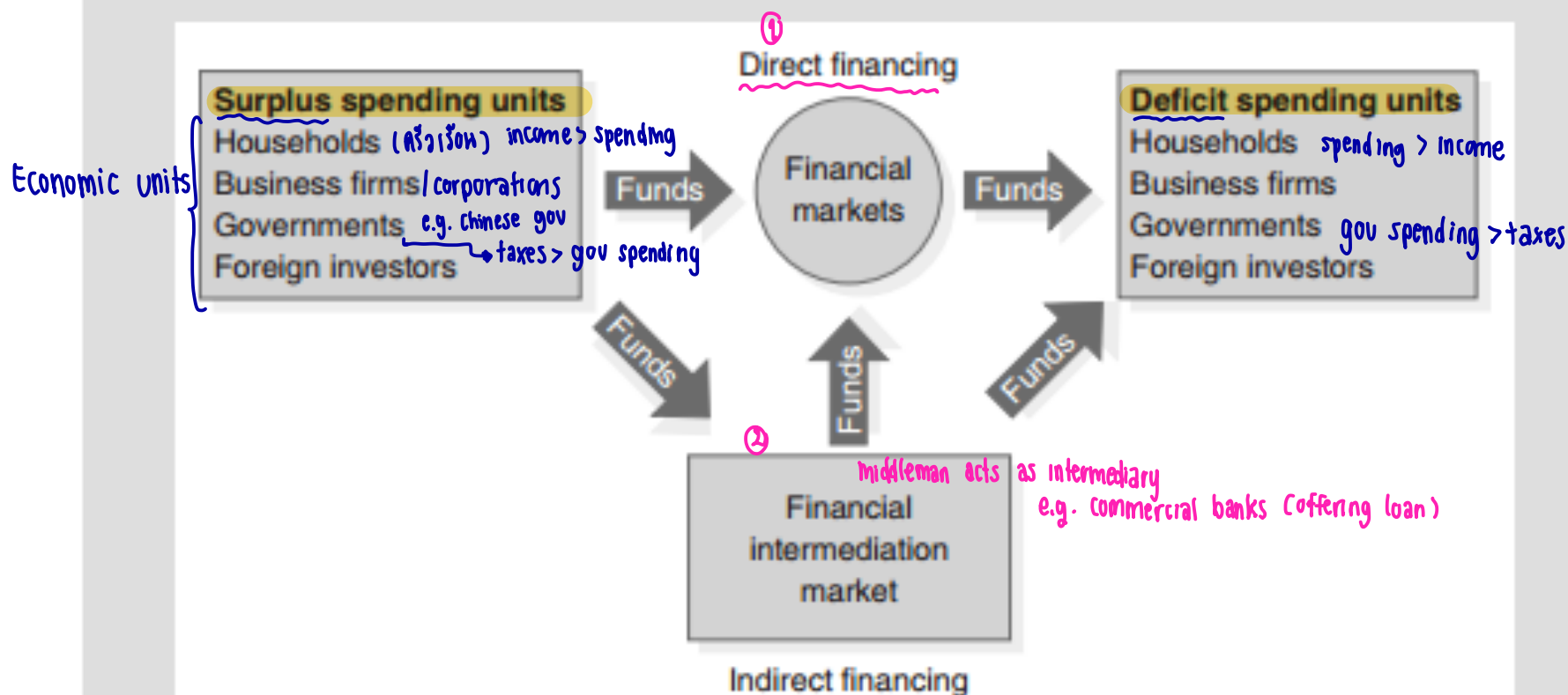
surplus & deficit units meet
via ①

- This example highlights the importance of **financial markets** and **financial intermediaries** in our economy. ②
- We need to acquire an understanding of their *general structure and operation* before we can appreciate their role in our economy.

Overview of Financial System

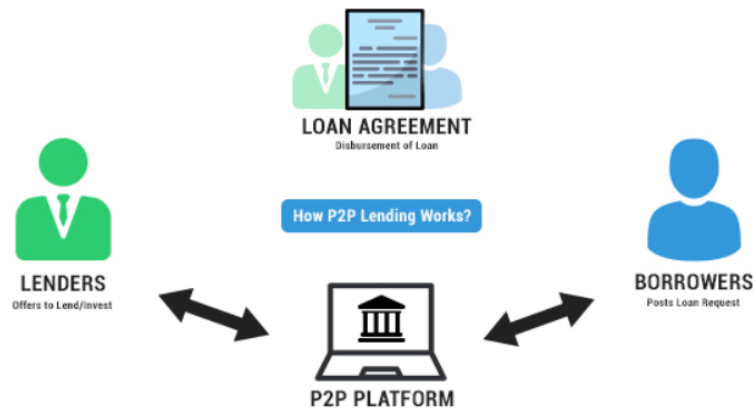
EXHIBIT 1.1

Transfer of Funds from Surplus to Deficit Spending Units



Peer to Peer Lending

similar to
direct financing



Crowd Funding



Function of Financial Markets

- Channels funds from person or business without investment opportunities (i.e., “Lender-Savers-Surplus Units”) to one who has them (i.e., “Borrower-Spenders-Deficit Units”)
- Improves economic efficiency

Surplus (Savers)	Deficit Units (Borrowers)
Households	Business
Business	Government
Government	Households
Foreigners	Foreigners

Overview of Financial System

- **Direct Financing** : surplus unit \rightarrow markets \rightarrow deficit units
- **Indirect Financing**

Overview of Financial System

QUESTIONS??

- Why individuals want to invest directly and why not?
- Why would direct investment without financial intermediaries be costly?
- Why would indirect investment can be costly to individuals?

Direct Financing: Financial Markets

Direct Financing: Financial Markets

- ↗ important to economy
- **Financial markets** are critical for producing an efficient allocation of capital, allowing funds to move from people who lack productive investment opportunities to people who have them.
- Financial markets also improve the well-being of consumers, allowing them to time their purchases better.
- **For example**, if you save \$1,000, but there are **no** **financial markets**, then you can **earn no return on this** - might as well put the money under your mattress. ^{excess cash} ^{nothing happen & risk of losing money & inflation risk}
- However, if a carpenter could use that money to buy a new saw (increasing her productivity), then he is willing to pay you some interest for the use of the funds.

Structure of Financial Markets

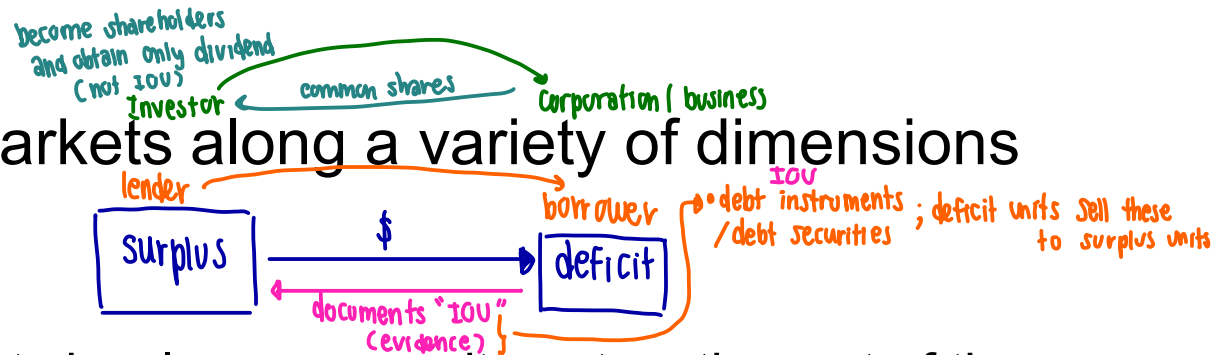
To define financial markets along a variety of dimensions for starters...

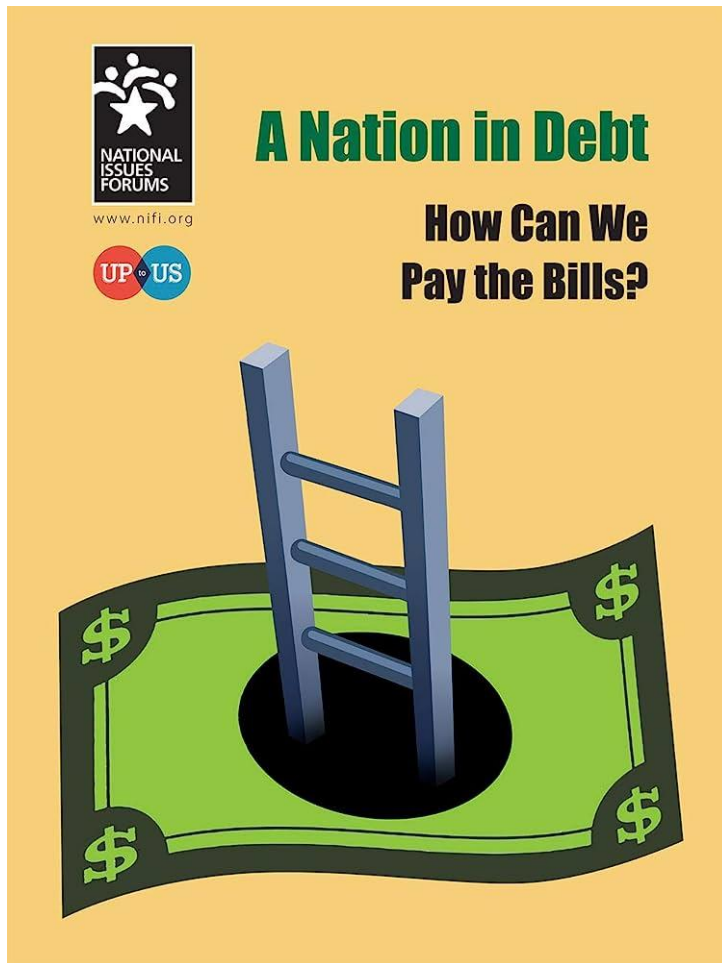
□ Debt Markets

- Debt instruments involves a commitment on the part of the issuer to pay a stream of cash flow to the lender over a period until maturity when the obligation is discharged.
- “Bond” is the most common form

□ Equity Markets

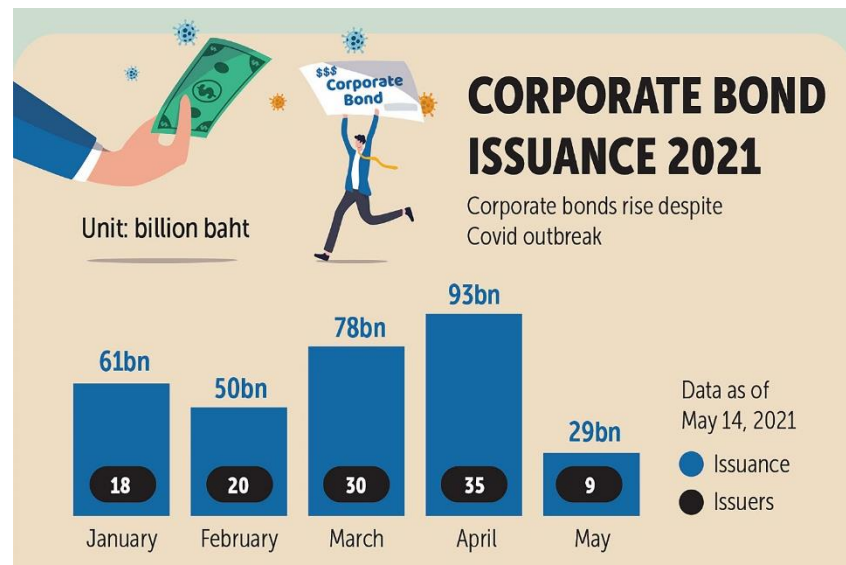
- Equity instruments are issued to investors (or shareholders) who are entitled to receive that is left over after obligations are paid. If a lot is left over, shareholder has done well. If not, shareholder has done poorly.
- “Common stock” is the most common form.





China sees RMB61.9 trln bond issuance in 2022

Updated: January 29, 2023 Source: Belt and Road Portal



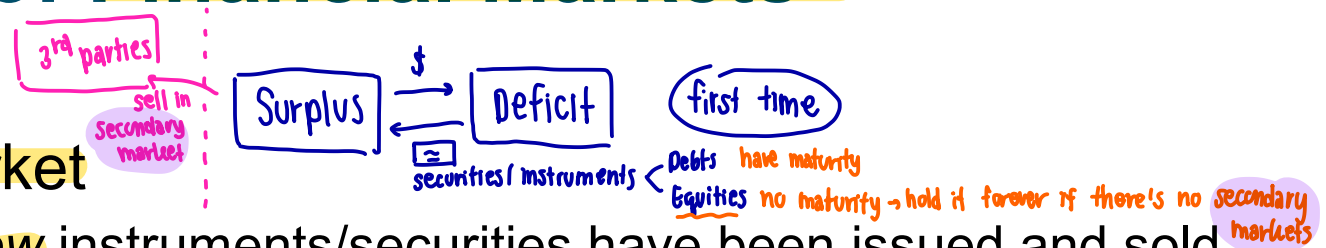
Source: The Thai Bond Market Association

BANGKOK POST GRAPHICS

	SET	1,345.69	+7.34
	Open	10,110 M	+0.55%
☰	Quote	Summar	Graph News e-Service
SILICON CRAFT TECHNOLOGY PUBLIC COMPANY			
🔍	SICT	4.14	+200%
		4.14	+2.76
			Avg
	Volume	Bid	Offer
	43,644,500	4.14	
	1,935,000	4.12	
	1,869,200	4.10	
	729,300	4.08	
	425,200	4.06	
	B/S	Volume	Price
	S	25,000	4.14
	S	3,000	4.14
	S	5,000	4.14
	Time		
	10:22:44		
	10:22:26		
	10:22:04		
Prev	1.38	Open	23,714,900
High	4.14	Buy	
Low	4.14	Sell	10,876,200
Ceiling	4.14	Open1	4.14
Floor	0.01	Open2	
IM%	100%	Volume	34,591,100
Flag		Value	143M
PrjCIs		Biglot	



Structure of Financial Markets



❑ Primary Market

- When **new** instruments/securities have been issued and sold to **initial buyers**, they are sold in a 'primary' market
- Typically **involves** an **investment bank** who **underwrites the offering** | helps to channel fund to deficit units
* to raise fund

❑ Secondary Market

- previously issued instruments/securities are traded to others, they are traded in a 'secondary' market.
- Typically **involves** both **brokers** and **dealers**

① promote liquidity ; ability to resell for 1st buyers

② let us know the market values of assets
<market price>

Structure of Financial Markets

Define by maturity



borrow 10Y → Invest in long term project
Invest in stock → infinite time

❑ Money Market

- If the instruments/securities have a maturity of (or commitment to repay) **less than one year**, it is called a money market instruments. *for working capital*
- It is a **debt securities by nature**.

↘ fullfill the shortage in cash

↳ return in short period of time

❑ Capital Market

- If the instruments/securities have a **maturity longer than one-year**, it is called a capital market instruments
- They typically include **long term bond and stocks**.

└───┘
for long term investment

Structure of Financial Markets

Trading mechanism ; how do you trade the instruments

❑ Exchanges

- Trading conducted in central locations with certain set of rules

- Information is publicly available *everyone know the trading information
e.g. know the trading price immediately*

e.g. New York Stock Exchange, Chicago Board of Trade, Stock Exchange of Thailand

❑ Over-the-Counter Markets (OTC)

- Trading with dealers or other traders based on negotiations.

- No public information regarding previous transactions *another name for bond market → e.g. you don't know the price of govt bond immediately*

e.g. market for Treasury Securities and Foreign Exchange markets

trading btw trader and dealer



Structure of Financial Markets

❑ Organized Markets

- The ^{regulated by la}markets in which traders, brokers or dealers meet to buy and sell securities according to the rules set by the governing body is called “organized” market.
- These are governed by the designated authority (e.g. SEC)

❑ Unorganized Markets *e.g. cryptocurrency*

- transactions which takes place outside a well established exchange is called transactions in “unorganized” market.
- These may involve indigenous bankers and private money-lenders while the demand comes from those who are unable to access the organized markets or falls short of their requirements

Raising funds by

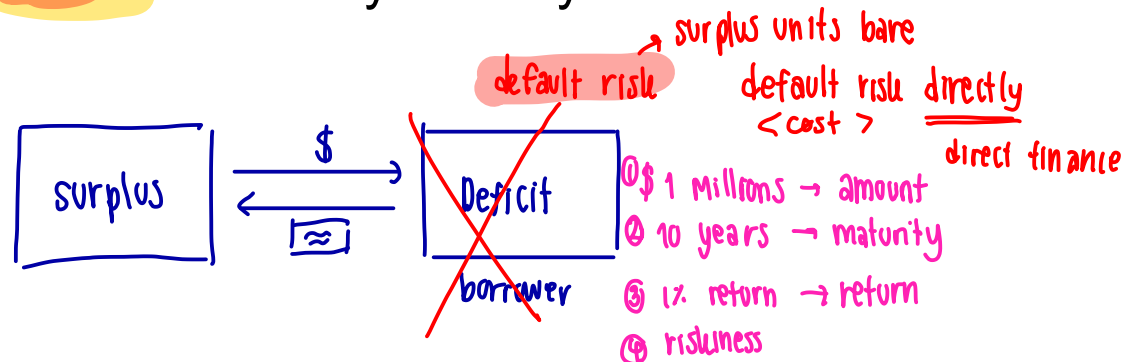
Financial Markets: Pros and Cons

Pros

- Lower cost of funds for the borrowers no middleman
- Higher expected returns (relatively) for the savers-lenders

Cons

- Require the coincidence of demands and supply to make the transaction occur
- Cost and risks are directly born by the savers-lenders



Insider trading, fraud crackdown accelerates under SEC

PUBLISHED : 19 OCT 2021 AT 09:43

Thailand is seeking to speed up criminal proceedings to crack down on insider trading, securities fraud and other illegal financial transactions, according to the Securities and Exchange Commission.

The SEC plans to have more authority to investigate criminal dealings in equities, bonds and digital assets, according to secretary-general Ruenvadee Suwanmongkol. The proposal would speed up charges as the current process, mostly done through the police, takes a long time, she said.

“We have better trained staff to deal with those sophisticated misconducts in the capital markets,” Ms Ruenvadee said in an interview Friday. “Faster charges would send a strong signal to those individuals who view that the prolonged legal processes is worth taking a risk for cheating and fraud.”

SEC fines IFEC execs for insider trades

Suphanan ordered to reimburse B25.86m

PUBLISHED : 24 AUG 2018 AT 06:14

NEWSPAPER SECTION: BUSINESS
WRITER: PATHOM SANGWONGWANICH

The Securities and Exchange Commission (SEC) has imposed civil fines on current and former executives of Inter Far East Energy Corporation Plc (IFEC) on grounds of insider trading.

The market regulator has ordered IFEC chief executive and director Suphanan Rittiphairoj and former director Thanawat Chansuwan to pay civil fines and return total benefits worth a combined 25.86 million baht.

The SEC's investigation found that both Mr Suphanan and Mr Thanawat attended the company's board of directors meeting on Nov 1, 2016 and acknowledged how IFEC lacked sufficient financial liquidity to repay its debt obligation for bills of exchange (B/Es) coming due at year-end 2016.



Interpol is currently sought by the **Department of Special Investigation (DSI)** to issue a red notice for the pursuit of the former **chairman** of a company known as **Stark Corp**, on charges of **financial misconduct**. The DSI issued this plea after the chairman did not adhere to the call to report to the DSI for acknowledging charges related to Stark's financial statement anomalies.

It is understood that Chanin Yensudchai is part of a group of ten individuals who are under accusation by the Securities and Exchange Commission (**SEC**). Their alleged **crime** was the creation of deceptive statements for Stark Corp and collaborating establishments during the years 2021 and 2022, with the primary intention of defrauding others and acquiring their assets.

In conjunction with the SEC's charges, Stark's minority stakeholders and bondholders have lodged complaints with the DSI against a total of eight individuals, and entities which are believed to have engaged in fraudulent activities and **money laundering** at the financially distressed wire and cable manufacturing company.



How The Other Form of Financing Help?

- Primary disadvantages using financial markets (i.e. direct financing)?
- Risks
 - Interest rate risk
 - Default risk/Counter party risk
 - Sovereign risk
 - FX risk
 - etc..

Indirect Finance

- Lisa is planning to buy a new house and look for home loan.
- Amelia is looking to insure new car but not sure which company is most suitable for her needs.
- Are you willing to make a loan to your neighbor by putting funds in a saving account and earn 5% and let a bank lend it to her and charge 10% rather than lend her yourself?
earn much less compared to lend to neighbor
- How intermediary solve these problems?

Indirect Finance

- Instead of savers lending/investing directly with borrowers, a financial intermediary (such as a bank) plays as the middleman:
 - the intermediary obtains funds from savers
 - the intermediary then makes loans/investments with borrowers
- This process, called financial intermediation, is actually the primary means of moving funds from lenders to borrowers.
- What are some example of financial intermediary?



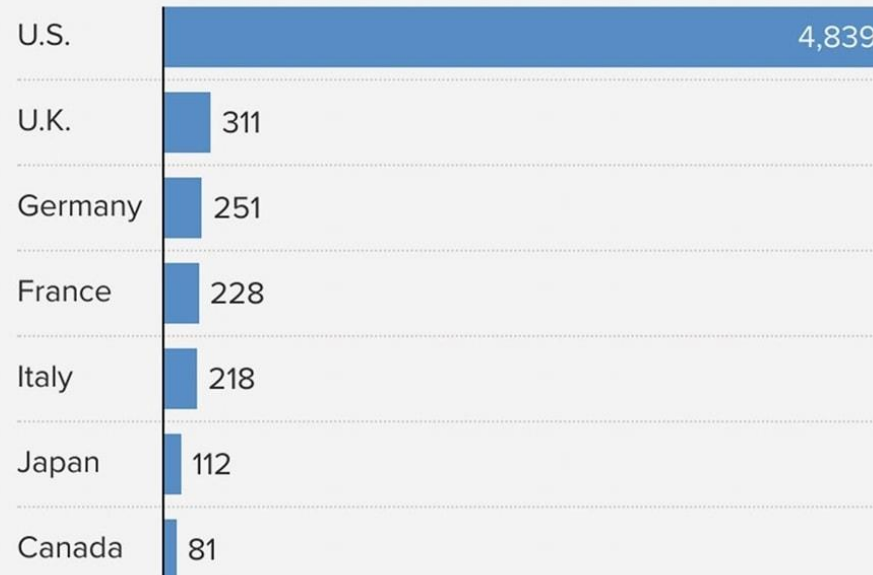
chartoftheday

In Thailand ~10-20 commercial banks

⋮

7/17/2023

The U.S. has more commercial banks than all other G7 countries combined



Financial Intermediation



Basic Financial Intermediation

- raise funds by issuing claims to SSUs (entity with surplus);
- use funds to buy claims issued by DSUs (entity with deficit).

Banks take care of risks instead of depositors

time horizon
unmatched maturity

ST deposit ; low int rate
LT loan ; charge higher int rate

Claims normally have unmatched characteristics.

- SSU has claim against financial intermediary (e.g. Bank);
- Financial intermediary has claim against DSU.
- Match maturity of claim to planned investment period => lead to holding period return.
- Buy claim with longer maturity, but sell at end of period => lead to price risk.
 borrower
- Buy claim with shorter maturity, then reinvest. => lead to reinvestment risk.
 depositor

Financial Intermediation

- **Comparative advantage of intermediation**
 - **Economies of scale** ; banks source funds from many depositors then lend to many borrowers
→ 1 resource can be used in many projects
 - **Transaction cost control** ; banks have resource to acquire information ; like one-stop service
 - **Risk management expertise** *→ In direct finance ; require a lot of time to find suitable borrowers*
- *Various banks in the economy*
Competition pulls interest rates down
 - **Financing less costly**
 - **Projects have higher NPVs** *→ bank will lend money to ⊕ NPV project*
 - **Investment in real assets boosts economy**

Function of Financial Intermediaries

- Financial intermediaries “transform” claims. This transformation process involves intermediation and financial intermediaries exist due to market imperfections from:
 - Transaction costs
 - Information costs
- Transactions Costs
 1. Financial intermediaries make profits by reducing transactions costs
 2. Reduce transactions costs by developing expertise and taking advantage of economies of scale

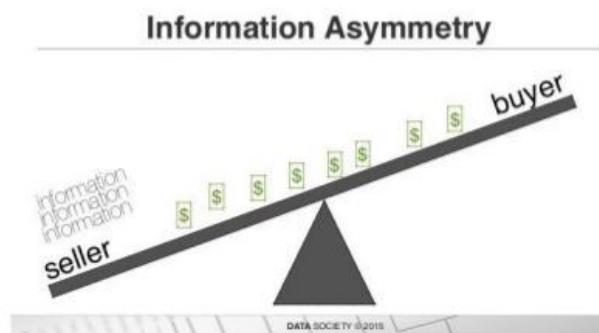


Function of Financial Intermediaries

- Financial intermediaries help an economy by providing the means for individuals and businesses to diversify their asset holdings.
- Like a whole seller, low transaction costs allow intermediaries to buy a range of assets, pool them, and then sell rights to the diversified pool to individuals.
- Lower transaction costs also mean that it can provide its customers with *liquidity services* to conduct transactions.
 - For example, banks provide depositors with checking accounts that enable them to pay their bills easily; Depositors earn interest on checking and savings accounts and yet still convert them into goods and services whenever necessary

Function of Financial Intermediaries

- Another reason financial intermediaries exist is to reduce the impact of asymmetric information.
- One party lacks crucial information about another party, impacting decision-making.
- We usually discuss this problem along two fronts: adverse selection and moral hazard.



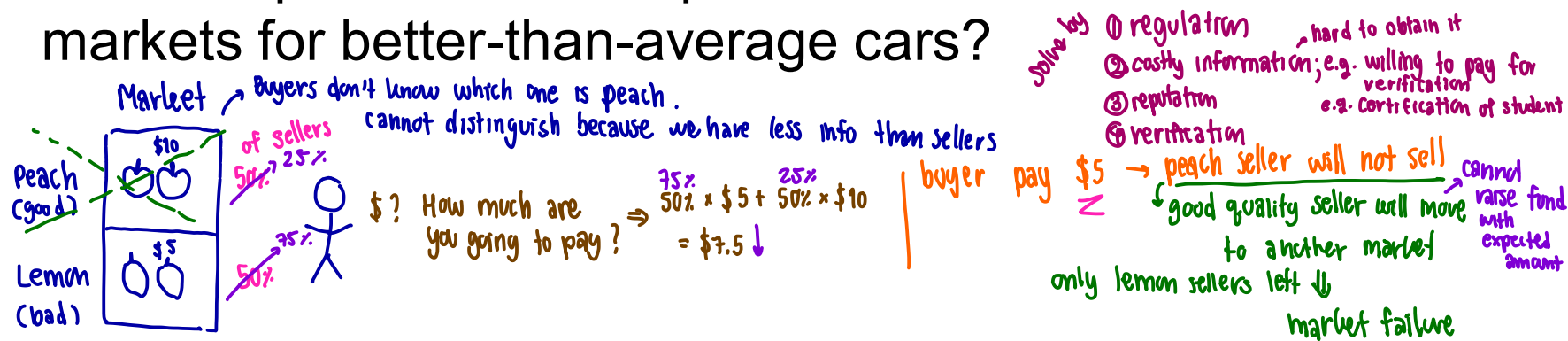
1 party has more info than another

buyer → Seller

e.g. Seller tells only good info, not bad info

Function of Financial Intermediaries

- The **Market for Lemons** by George A. Akerlof.
- A buyer of a ^{e.g. 2nd hand assets} used car is uncertain and cannot identify the true value of the vehicle. Thus he is willing to pay at average price.
- What if a seller has a superior knowledge (that his car is a lemon!!)
- How this phenomenon, if persists, lead to the failure of markets for better-than-average cars?



Function of Financial Intermediaries

- Example of insurance markets.
 - Older individuals tend to have difficulty buying health insurance. They know more about their health than the insurance company.
 - The proportion of unhealthy people in the pool of insured people rises.
 - Price of insurance rises so healthy people with low risk drop out.
 - Proportion of unhealthy people rises. Prices increase more.

→ can track medical records of customers
→ If they lie to company, company can cancel the insurance

Function of Financial Intermediaries

- **Adverse Selection** ^{before transaction}
 1. Those who possess more information ^{buyer with more info → go to another party that has less info} tend to take advantage from the other side (of contract), who have less information
 2. Examples of adverse selection include
 - Health or car insurance
 - Risky borrowers



Function of Financial Intermediaries

- Moral Hazard
 - engage with transaction already → engage with riskier activities after transaction more frequently than before
 - 1. Hazard that one side has incentives to engage in undesirable (immoral) activities
 - 2. Similarly, example include the various financial industry



Syn Mun Kong Cancels “Covid 2 in 1” Infection Insurance Policy

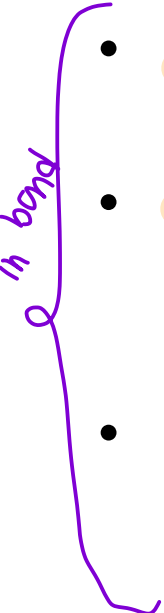
Syn Mun Kong announced the cancellation of Coronavirus infection insurance as new cases of infection increase rapidly, resulting in a severe public health crisis.

• 16/07/2021

Types of Financial Intermediaries

- Depository Institutions (Banks): accept deposits and make loans. These include commercial banks and thrifts.
 - Commercial banks
 - Insurance Companies
 - Pension and Government Retirement Funds
 - Finance Companies
 - Mutual Funds *→ make investment on your behalf*
 - Etc...

Financial Risks

- 
- **Credit or default risk:** risk that a DSU may not pay as agreed
 - **Interest rate risk:** fluctuations in a security's price or reinvestment income caused by changes in market interest rates
 - **Liquidity risk:** risk that a financial institution may be unable to disburse required cash outflows, even if essentially profitable
 - **Foreign exchange risk:** effect of exchange rate fluctuations on profit of financial institution
 - **Political risk:** risk of government or regulatory action harmful to interests of financial institution.

Regulation of Financial System

Main Reasons for Regulation

1. Increase information to investors and protect them from abuses
2. Ensure the soundness of financial intermediaries to stabilize the financial system

Increase Investor Information

- Adverse selection and moral hazard problems that may hinder the efficient operation of financial markets and may also keep investors away from financial markets.
- The Securities and Exchange Commission (SEC) requires corporations issuing securities to disclose certain information about their sales, assets, and earnings to the public and restricts trading by the largest stockholders (known as insiders) in the corporation.

Ensure Soundness of Financial Intermediaries

- Providers of funds (depositors, like you) to financial intermediaries may not be able to assess whether the institutions holding their funds are sound or not.
- If they have doubts about the overall health of financial intermediaries, they may want to pull their funds out of both sound and unsound institutions, which can lead to a financial panic.
- Such panics produces large losses for the public and causes serious damage to the economy.

^{mutual fund company} TMBAM Eastspring debacle rattles market

↳ had liquidity problem during COVID-19

Two mutual funds with an investment strategy focusing on foreign debt were torpedoed by panic selling.

PUBLISHED : 28 MAR 2020 AT 04:00

NEWSPAPER SECTION: BUSINESS
WRITER: NUNTAWUN POLKUAMDEE

Two fixed-income funds of TMBAM Eastspring were a catalyst igniting a major redemption in Thailand's mutual fund industry, to the point where the selling spree nearly sparked a liquidity crunch.

Net sales of Thai bonds by asset management companies totalled 35 billion baht on March 20 and 30.5 billion baht on March 27, according to data from the Thai Bond Market Association.

Local financial authorities, namely the Finance Ministry, the Bank of Thailand and the Securities and Exchange Commission, on March 22 issued urgent measures to address a liquidity problem in the mutual fund industry.





↑ to make sure investors obtain money back

The Bank of Thailand (BOT) addressed the liquidity situation to support the well-functioning of the bond market. The BOT purchased government bonds amounting more than 100 billion baht during March 13-20, 2020, and reduced and cancelled parts of the BOT bond issuances in order to increase liquidity in the government bond market. In addition, **the BOT, the Ministry of Finance, and the Securities and Exchange Commission (SEC) have been closely monitoring the situation and deemed it necessary to implement additional measures to stabilize the Thai financial markets on March 22, 2020.** These measures would stop the liquidity problem in the financial markets from spreading further. The three measures are summarized as follows.^{18/}

1. Mutual Fund Liquidity Facility (MFLF) The BOT will provide liquidity through the repurchase agreement or repo transactions charging a special rate based on the policy rate minus 0.5 percent for financial institutions providing liquidity support for money market funds (MMFs) and daily fixed income funds (Daily FI). On March 24, 2020, the BOT extended the scope of this liquidity facility to cover all MMFs and Daily FI funds. Later on March 30, 2020, the BOT further extended the scope of the facility in order to increase flexibility and efficiency by allowing more types of assets to be used as collateral in repo transactions with the BOT for the liquidity support.

AID MEASURES FOR SMES AND DEBENTURE MARKET



Six-month deferment period for SMEs with credit line up to 100 million baht



500 billion baht in loans at 2% per year for two years with a six-month interest-free period for SMEs with credit line not exceeding 500 million baht



Establishment of the Corporate Bond Stabilisation Fund to reduce fundraising risks in the debenture market



Lower contribution to the Financial Institutions Development Fund collected from commercial banks (0.23% of each bank's deposit base, down from 0.46%)



Source: Bank of Thailand

BKPgraphics

regulators from SEC



Regulation Reason: Ensure Soundness of Financial Intermediaries

- To protect the public and the economy from financial panics, the government has implemented regulations:
 - Restrictions on Entry
 - Disclosure
 - Restrictions on Assets and Activities
 - Deposit Insurance
 - Limits on Competition
 - Restrictions on Interest Rates