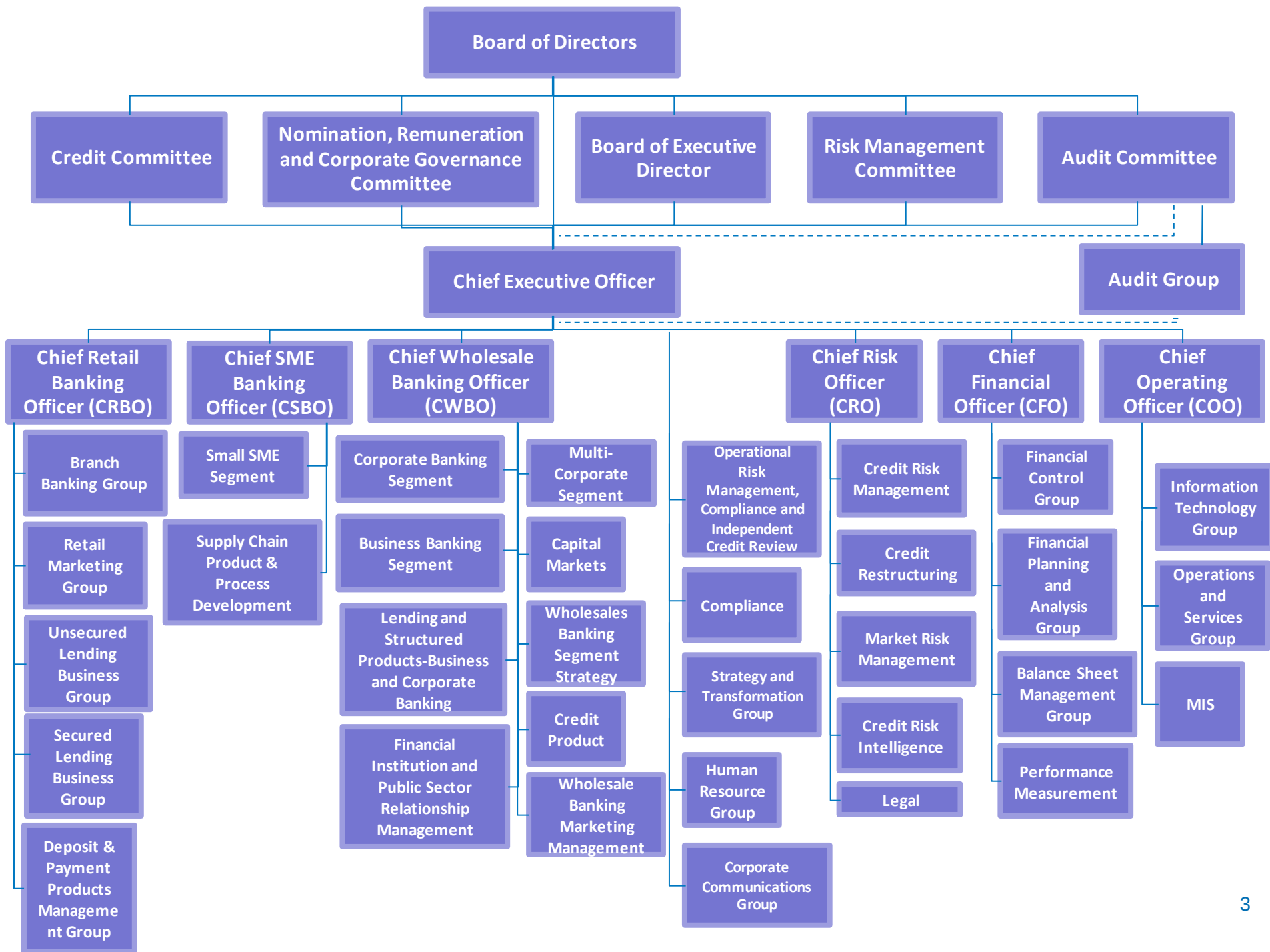

EE431: Lecture 6.1 (Spring 2012)

Banking 101,

Understand Bank's Products (1)

Banking 101

Knowing Organization Structure



Banking 101

Credit Products: Introduction

How banks' credit products help businesses?

- **Increase return on shareholders' equity**
 - Role of Leverage (more risk-taking)
- **Cost management**
- **Liquidity**

How banks' credit products help businesses? (1)

Assume Stock price = 1 Baht/share
Sales = 2,000 Baht
Cost of goods sold = 90%
Interest = 10%

case1

Asset	Equity
100	100

- 100 shares
- No borrowing

Net profit = $2,000 - 2,000 \times (90\%) = 200$

Earning per share = $200/100 = 2$ Baht

case2

Asset	Liability
100	25
	Equity
	75

- 75 shares
- Borrow 25 Baht

Gross profit = $2,000 - 2,000 \times (90\%) = 200$

Net profit = $200 - 25 \times (10\%) = 197.50$

Earning per share = $197.5/75 = 2.63$ Baht

**More leverage, more return
And more risk ...**

How banks' credit products help businesses? (2)

➤ Cost management

- Banks are major and straightforward sources of funds (beside trade credit & own equity), especially for those with no access to capital markets (SMEs).
- Banks can provide 'suitable' type of credit for businesses.

Such as loan for importer, loan for exporter, working capital (for buying raw materials & day-to-day operations to fill orders).

➤ Liquidity

- Some products provides 'borrowing optionality' so businesses can borrow when they want to, hence less need to hoard cash (which hurts profitability).

General types of credits

➤ For working capital

- Provide liquidity for short term going concerns for businesses.
- Cyclical & self-liquidating loan, e.g. a firm uses O/D to buy raw materials then sell its goods and O/D is automatically repaid.

➤ For investment

- To buy long-term assets or to finance long term projects
- Syndicated loans for really big corporates.

➤ For guarantee

- Banks don't *de facto* lend, rather just provide 'guarantee' and in return are compensated by fees.
- E.g., letter of guarantee, standby L/C.

Banking 101

Some Important Credit Products

How banks compute interest: Amortized Rate

n = 10

i = 5%

Amortize Loan					
year	Principal Beginning of Year	Interest Expense	Principal Reduction	Installment	Principal End of Year
1	10,000	500	795	1,295	9,205
2	9,205	460	835	1,295	8,370
3	8,370	419	877	1,295	7,494
4	7,494	375	920	1,295	6,573
5	6,573	329	966	1,295	5,607
6	5,607	280	1,015	1,295	4,592
7	4,592	230	1,065	1,295	3,527
8	3,527	176	1,119	1,295	2,408
9	2,408	120	1,175	1,295	1,233
10	1,233	62	1,233	1,295	-
Total		<u>2,950</u>	<u>10,000</u>		

Typically, mortgage loan & business loan.

How banks compute interest: Flat Rate

n = 10

i = 5%

Flat Loan					
year	Principal Beginning of Year	Interest Expense	Principal Reduction	Installment	Principal End of Year
1	10,000	500	-	500	10,000
2	10,000	500	-	500	10,000
3	10,000	500	-	500	10,000
4	10,000	500	-	500	10,000
5	10,000	500	-	500	10,000
6	10,000	500	-	500	10,000
7	10,000	500	-	500	10,000
8	10,000	500	-	500	10,000
9	10,000	500	-	500	10,000
10	10,000	500	10,000	500	-
Total		<u>5,000</u>	<u>10,000</u>		

Typically, automobile loans & personal loans...

Effective rate of flat rate is twice larger than that of
amortized rate. Day Light Robbery for unknowns.

Typography of Loan

➤ **Loan:**

- Has specific maturity date. (3 months, 5 years, etc.)
- Has non-compounding interest calculation.
- Can be either 1) short-term revolving or 2) long-term non-revolving (term loan).
- Term loan will have specific draw-out expiry date (a.k.a blackout period).
- Repayment is in form of fixed installment.
- If it is not drawn in time, the line is cancelled.
- If it is repaid before contract time (a.k.a. prepayment), clients must compensate banks with extra fee.

➤ **Do banks have foreign currency loan?**

- Yes. Same structure as THB loan, with FX risk.

Overdraft (O/D) (1)

➤ What is O/D?

- Overdraft is provided when businesses make payments from their business *current account* exceeding the available cash balance. An overdraft facility enables businesses to obtain short-term funding that is recurrent ('revolving'). Short-term maturity (less than a year).

➤ How O/D works ?

- Based on current account (a.k.a. checking account).
- Credit profile appraised by banks.
- Draw out borrowing by writing checks.
- Contract will be reappraised by banks annually up to credit profile & utilization rate.

➤ How to compute interest?

- Daily interest on end-of-day outstanding.
- Repayment from account inflow (deposit).
- Monthly amortized (principal reduction).

Overdraft (O/D) (2)

➤ **How much O/D is limited?**

- BOT limits THB 30 mil. For each obligor.

➤ **What happens if businesses abuse O/D (wrong purpose)?**

- Banks can't really track the use of funds of clients.
- O/D is designed to be 'Working Capital' (procurement of raw materials & day-to-day operations). Short term nature.
- Should it be more or less expensive vis-à-vis normal loans ?

Syndicated Loan

➤ What is syndication?

- Loan mutually provided by multiple banks (pooled loan).
- 'Lead Manager' is the main bank that syndicates the deal
- Subject to same clause & condition of contract and collateral.

➤ Why syndicate?

- Big ticket (huge size). Few billion baht and beyond.
- Too concentrated on one bank's portfolio...hence risk-sharing
- Collude among banks, avoid pricing war.
- One unified contract. Less headache for borrower.
- One contact point. The 'Lead Manager' bank.

Bill Discount

➤ What is bill discount ?

- Businesses sell IOUs (received from trade partners or debtors) to a bank at discount.
- Credit risk transferred to a bank (discount as risk premium).
- Instantly provide liquidity to businesses (get cash now...)

➤ How many type of bills?

- Bills of exchange (B/E) – smaller amount, short tenor
- Promissory note (P/N) – bigger amount, long tenor
- Checks

Bank's Guarantee

- **Not per se lending from a bank.**
- **Contingent liabilities for banks in case buyers of guarantee defaults.**
- **Examples**
 - Letter of Guarantee (e.g., electricity & LPG gas lot purchases)
 - Stand-By L/C (required by foreign banks of business's trade partner)
 - L/C, Domestic L/C (bank's guarantee that sellers will be paid).
 - Aval on bills (guarantee on bills)