
Chapter 1

The Basics of Risk Management

1. 銀行的組織

- 銀行獲利的方法

- Providing services to customers
- Taking risk (本課程主要討論此部分)
 - ◆ More risk brings more return, but also increases the danger that the bank could lose badly and be forced out of business.
 - ◆ Except to generate profit, how to stay in business is another concern of a bank.

*直接金融 (銀行賺service fee) vs. 間接金融 (銀行賺risk premium)

- What is Risk Management?

- ensure the total risk being taken is matched to the bank's capacity for absorbing losses in case things go wrong
- 幫助 CEO 如何利用公司稀少資源，在最小風險下，賺得最大利益 (allocate resources to various risk units based on a trade-off between risk and revenue potential)

- 銀行之組織與其功能 (p.2~4 Figure 1-1)

- 商業銀行 vs. 投資銀行 vs. 金控
 - ◆ In 1933, the Glass-Steagall Act generally prohibited commercial banks from underwriting securities
 - ◆ In 1999, the Financial Services Modernization Act repealed Glass-Steagall barriers between commercial and investment banks

2. 銀行所遭遇之風險

- Market Risk

- Arising from the possibility of losses from unfavorable market movements
 - Examples:
 - ◆ 1929 ~ 1932, Great Depression
 - ◆ 1980s, Saving and Loans
 - Lending long-term fixed-rate mortgage and borrowing short-term deposits
 - ◆ Oct 19, 1987, Black Monday
 - ◆ 1998, Russian Default (Chase vs. LTCM)
 - LTCM 買俄元 (賭俄元會回升), 賣相關貨幣 (若俄元default, 相關貨幣貶值, 剛好可以用來避險) → 但最後俄元default, 相關貨幣沒貶值
 - ◆ Mar. 2000 ~ Mar. 2001, Nasdaq stock index fell 65%
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● Credit Risk

- Arising from defaults, when an individual, company, or government fails to honor a promise to make a payment
- Gray area between market risk and credit risk
- Examples:
 - ◆ Loan Credit Risk (借給公司，而公司倒了)
 - ◆ Issuer Credit Risk (銀行或公司發債，自己還不出來)
 - ◆ Counterparty Credit Risk (衍生性商品之交易對手違約)
 - ◆ Settlement Credit Risk (Herstatt Risk)
 - 1974，德國銀行 (Herstatt Bank) 與美國交易對手 (時差或是假日問題)
 - 券商之買賣交割

- **Operating Risk**

- The risk of direct or indirect losses resulting from inadequate or failed internal processes, people and systems or from external events.
- Examples:
 - ◆ Using the wrong data in pricing model
 - ◆ Trader can control customers' account

- **Blends of Risks**

- For example, Nick Leeson and Barings Bank (trade Nikkei 225 in 1994~1995) is the case of both the market risk and operating risk.
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- Three levels for measuring and managing risk:

- Transaction level
- Business-unit level
- Corporate level

- * 本書主要關心前兩種level

- * Corporate level之風險管理主要由董事會決定

3. 董事會如何管理風險

- Deciding the target credit rating
 - Target rating vs. Actual rating (by credit rating agencies)
 - High rating vs. Low rating
- Determining the amount of available capital
 - Available Capital = assets market value – liability market value
= nominal asset value – provisions - liabilities
- Allocating risk limits
 - Risk capacity = prob. of default × available capital
 - 考慮各單位之預期報酬目標，並考慮各單位間風險分散的程度，將risk capacity分配到各單位，使得整體報酬最大