Global Banking & Capital Markets
REVIEW I
Prof. Ian Giddy
Stern School of Business,
New York University

What is Global Banking and Capital Markets?

The International Financial Markets
◆ Money and foreign exchange; derivatives; international bonds & equities; loan trading

◆ The Global Banking Business
◆ Lending; trading and transactions; underwriting; M&A; project financing; asset management; advisory services; etc
What are the Global Financial Markets?

- The Foreign Exchange Market
- Domestic and International Money Markets
- Domestic and International Capital Markets
- The Derivatives
- International Equity and M&A
- Using the Global Capital Markets: Global Banking Strategy and Implementation

Where the Eurocurrency Market Fits In

- US Domestic Market
- Eurodollar Market
- Euro-Deutsche Mark Market
- Foreign Exchange Market
- Euro-Yen Market
- Euro-Commercial Paper Market
- Euro-Floating Rate Note Market
- Straight Eurobond Market
- German Domestic Market
- Japanese Domestic Market
Interest Rate Linkages in the International Money Market

Two stories to tell:
- Domestic vs. Euro
- Eurocurrency A vs. Eurocurrency B

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Global Banking: Products and Customers

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New York University
Products or Customers?

Sales

Corporate Finance

Customer-Driven Innovation

Capital Markets

Client-Arena-Product Matrix

Products offered

Clients served

Markets covered
Products

- Credit products
- Trading and positioning
- Risk management products
- Financial engineering and structured finance
- Underwriting and distribution
- Asset management
- Retail and private client services
- Transactions services

Client-Arena-Product Matrix

Build versus buy?
Client-Arena-Product Matrix

Example: SBC and US bank equity

Products offered

Clients served

Markets covered

Sell? (NatWest)

Products offered

Clients served

Markets covered
**NatWest Bank?**

<table>
<thead>
<tr>
<th>NatWest Bank Products</th>
<th>Corporations</th>
<th>Government</th>
<th>Institutions</th>
<th>High net worth</th>
<th>Retail</th>
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<td>Equity underwriting</td>
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<td>Bond underwriting</td>
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<td>Mergers and Acquisitions</td>
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<td>- Securitized products</td>
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<td>- Futures</td>
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<td>Private Banking</td>
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**To Succeed, Analyse the Industry Structure**

- **COMPETITIVE ADVANTAGE**
- **SUPPLIERS**
- **CUSTOMERS**
- **SUBSTITUTES**
- **BARRIERS TO ENTRY**
New Financial Products: Economics of Financial Innovation

- Certain kinds of *market imperfections* allow hybrids to flourish
- But innovation are readily copied; so only certain kinds of *firms* can profit from innovations.
- There is a product cycle and profitability cycle of innovations.
Financial Innovations: What to Look For

- Reallocating risk
- Increasing liquidity
- Reducing “agency costs”
- Reducing transactions costs
- Reducing issuers’ or investors’ taxes
- Circumventing regulations
- Circumventing internal constraints

Battle Mountain Gold

Forward Prices for Gold

- $400
- $425
- $450

$300/oz = Cost of Production

Each year, BMG chooses to produce if $P >300$
defer if $P <300$
**Principles of Innovation Through Financial Engineering**

- Bundling and unbundling basic instruments
- Exploiting market imperfections (sometimes temporary)
- Creating value added for investor and issuer by tailoring securities to their particular needs

**Key:** For the innovation to work, it must provide value added to both issuer and investor.

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**Asset Securitization**

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CHASE (SPONSOR)

CREDIT CARD RECEIVABLES

SALE OR ASSIGNMENT

CREDIT CARD RECEIVABLES

SPECIAL PURPOSE VEHICLE

ISSUES ASSET-BACKED CERTIFICATES
```
Example

Dayton Hudson Credit Card Master Trust, Series 1995-1

<table>
<thead>
<tr>
<th>Issue Date:</th>
<th>9/13/95</th>
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<tbody>
<tr>
<td>Expected Maturity:</td>
<td>2/25/2002</td>
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<tr>
<td>Structure:</td>
<td>Senior/Subordinated, sequential pay</td>
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<tr>
<td>Seller:</td>
<td>Dayton Hudson Receivables Corporation</td>
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<tr>
<td>Cards:</td>
<td>Private label cards for Mervyn's, Target and Dayton's Department Store</td>
</tr>
<tr>
<td>Servicer:</td>
<td>Retailers National Bank</td>
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<tr>
<td>Underwriter:</td>
<td>First Boston Corporation</td>
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<table>
<thead>
<tr>
<th>Tranche</th>
<th>Face Value</th>
<th>Coupon</th>
<th>Ave. Life</th>
<th>Rating</th>
<th>Description</th>
<th>Placement</th>
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<tr>
<td>A</td>
<td>$400 million</td>
<td>6.10%</td>
<td>3 Years</td>
<td>AAA</td>
<td>Senior</td>
<td>Public</td>
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<tr>
<td>B</td>
<td>$123 million</td>
<td>0.00%</td>
<td>3 Years</td>
<td>AAA</td>
<td>Subordinated</td>
<td>Private</td>
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</tbody>
</table>

Collateral Information

- Yield on portfolio: 22.52%
- Historical yield after delinquencies: 18.90%
- Number of accounts: 22,796,667
- Overcollateralization of A Tranche: 23.50%
- Largest geographic concentration: California (24.9%)
Case Study: Ongoing Payments

Finance Co.'s Customers

Finance Co. Ltd (Seller)

Hire-Purchase Payments

Servicing Fees

Trustee

Trustee

Responsibilities

Responsibilities

FCL 1997-A (Special Purpose Co.)

Monthly HP Payments

Monthly ABS Payments

Investors

Financial Guarantee Provider

Project Financing

Definition

- **Lending** to a single purpose entity for the acquisition and/or construction of a revenue-generating asset with limited or no recourse to the sponsor

- **Repayment** of the loan is solely from the revenues generated from operation of the asset owned by the entity

- **Security** for the loan
  - the revenue generating asset
  - all shares and interests in the entity
  - real property
  - all contacts, permits
  - authorizations, etc.; and,
  - all other instruments necessary for continuing project operations
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**Steps**
- Project Identification & Resource Allocation
- Risk Allocation & Project Structuring
- Bidding & Mandating Contracts
- Due Diligence & Documentation
- Execution & Monitoring
- Construction Monitoring
- Term Loan Conversion & Ongoing Monitoring

**Sample Structure**

- Sponsors / Shareholders
- Arranging Bank
- Syndicate Banks
- Equipment Supplier
  - Warranties and Supply Agents
  - Turnkey Construction
- Contractor
- Feed Stock (e.g., fuel) Supplier
  - Long Term Agreement
- Operator
  - Operations & Maintenance Mgmt
- Purchaser
  - Offtake (e.g., power purchase) Agreement

**Other Project Participants:**
- Currency and Interest Rate Hedge Providers
- Multilaterals and EDA’s
- Legal Counsel
- Technical Consultants
Ras Laffan

Mobil QM (Mobil Corp.)

30%

Joint venture agreement

70%

Qatargas (State of Qatar)

Contractors

LNG

Ras Laffan
Liquified Natural Gas

Korea Gas

LNG payments

Residual payments

Security Trustee (New York)

Debt service payments

Bondholders

Banks

Export Credit Agencies

Martell

* Martell
  * family
  * other shareholders

* Seagrams

* Grand Met

Concept: What are the goals and tactics of each in this ownership transfer?
Goals of Acquisitions

Rationale: Firm A should merge with Firm B if
\[ \text{Value of AB} > \text{Value of A} + \text{Value of B} + \text{Cost of transaction} \]

- Synergy
  - Eg Martell takeover by Seagrams to match name and inventory with marketing capabilities
- Gain market power
  - Eg Atlas merger with Varnity. (Less important with open borders)
- Discipline
  - Eg Telmex takeover by France Telecom & Southwestern Bell (Privatization)
  - Eg RJR/Nabisco takeover by KKR (Hostile LBO)
- Taxes
  - Eg income smoothing, use accumulated tax losses, amortize goodwill
- Financing
  - Eg Korean groups acquire firms to give them better access to within-group financing than they might get in Korea’s undeveloped capital market

Fallacies of Acquisitions

- Size (shareholders would rather have their money back, eg Credit Lyonnais)
- Downstream/upstream integration
  (internal transfer at nonmarket prices, eg Du Pont/Conoco, Pru/Bache)
- Diversification into unrelated industries
  (Kodak/Sterling Drug)
Using The Restructuring Framework
($ Millions of Value)

1. Current Market Price
2. Optimal restructured value
3. Potential value with internal improvements
4. Potential value with internal and external improvements
5. Financial engineering opportunities
6. Maximum restructuring opportunity
7. Disposal/ Acquisition opportunities
8. Strategic and operating opportunities
9. Company value as is
10. Current perceptions Gap: "Premium"

Mergers and Acquisitions: Summary

- Mergers & Acquisitions
- Divestitures
- Strategic Alliances

Concept: Is a business worth more within our company, or outside it?
Martell -- The Conclusion

M&A Advisory Services:  
1. Role of the Seller's Advisor

- Develop list of buyers
- Analyze how different buyers would evaluate company
- Determine value of the company and advise seller on probable selling price range
- Prepare descriptive materials showing strong points
- Contact buyers
- Control information process
- Control bidding process
- Advise on the structure of the transaction to give value to both sides
- Ensure all nonfinancial terms are settled early
- Smooth postagreement documentation
**M&A Advisory Services: 2. Role of Buyer's Advisor**

- Thoroughly review target & subs
- Advise on probable price range
- Advise on target's receptiveness
- Evaluate target's options and anticipate actions
- Devise tactics
- Consider rival buyers
- Recommend financial structure and plan financing
- Advise on initial approach and follow-up
- Function as liaison
- Advise on the changing tactical situation
- Arrange the purchase of shares through a tender offer
- Help arrange long term financing and asset sales

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**Alliance Capital**

- Trends in the business?
- Global business?
- Continue “active growth” management?
- Competition?
- Fees?
Portfolio Performance Evaluation

- How well did the portfolio do?
- How do we adjust for risk, to compare different managers?
- Why?
  - Risk
  - Timing
  - Asset allocation
  - Security selection

Global Private Banking

Key Issues to be Addressed

- Personal, family, business and political/economic context
- Personal Investment Portfolio
- Personal Retirement Plans
- Insurance
- Estate Planning
- Businesses
Private Banking
Individual Solutions

Your Needs
Overview
Liquid assets and securities
Real Estate
Partnerships
Fine Arts
Transfer of Wealth

Relationship-Manager
Matching your Needs with our Expertise

Translation by our Specialists
Private Financial Planning
Account Management
Real Estate Advice
Structured Finance
Art Consulting
Estate- and Trust Management

Optimizing asset structure and tax minimization opportunities

entrepreneurship
Assets accumulated
Proceeds from selling the business

retirement
financial portfolio
real estate investment
pension plan
health insurance

estate

?
**Global Private Banking**

- Client needs
- Provision of services to meet needs
- Where does the bank excel?

- *Add value to the relationship by building from asset management to family financial planning and family-owned investment banking services*

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**After Glass-Steagall**

- Universal Banking?
- Insurance
- Retail
- Wholesale
- Asset Management

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Citigroup

- Buy? Sell? Hold?
- What’s unusual about the deal?
- Will the combination produce net positive economic value?
- From where? Who will get it?
- How long before gains realized?
- Risks that the deal will fall through?

Valuation: The Key Inputs

- A publicly traded firm potentially has an infinite life. The value is therefore the present value of cash flows forever.

\[
\text{Value} = \sum_{t=1}^{\infty} \frac{C_F}{(1+r)^t}
\]

- Since we cannot estimate cash flows forever, we estimate cash flows for a “growth period” and then estimate a terminal value, to capture the value at the end of the period:

\[
\text{Value} = \sum_{t=1}^{N} \frac{C_F}{(1+r)^t} + \frac{\text{Terminal Va}}{(1+r)^N}
\]
### Models of Valuation

<table>
<thead>
<tr>
<th>Cash Flow to Firm</th>
<th>Cash Flow to Equity</th>
<th>Cash Flow to Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected Dividends to Stockholders</td>
<td>Net Income</td>
<td>EBIT (1 - tax rate)</td>
</tr>
<tr>
<td>- (1 - δ) (Capital Exp. - Depreciation)</td>
<td>- (1 - δ) Change in Working Capital</td>
<td>- (1 - δ) Change in Working Capital</td>
</tr>
<tr>
<td>= Free Cash Flow to Equity (FCFE)</td>
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<td>= Free Cash Flow to Equity (FCFE)</td>
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</table>

<table>
<thead>
<tr>
<th>Cost of Equity</th>
<th>Cost of Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basics</strong></td>
<td><strong>WACC</strong></td>
</tr>
<tr>
<td>The riskier the investment, the greater is the cost of equity.</td>
<td>WACC = ( k_e \left( \frac{E}{D+E} \right) + k_d \left( \frac{D}{D+E} \right) )</td>
</tr>
<tr>
<td>Models</td>
<td></td>
</tr>
<tr>
<td>CAPM: Risk-free Rate + Beta ( \times ) Risk Premium</td>
<td>( k_d \left( IF(D/E) \right) )</td>
</tr>
<tr>
<td>APM: Risk-free Rate + Σ Beta ( j ) ( \times ) Risk Premium ( x ) Factors</td>
<td>( k_d \left( IF(D/E) \right) )</td>
</tr>
<tr>
<td>( k_d ) = Current Borrowing Rate ( (1-t) )</td>
<td>( E, D ) = Market Value of Equity and Debt</td>
</tr>
</tbody>
</table>

### Client-Arena-Product Matrix: Citigroup

- **Products offered**
- **Clients served**
- **Markets covered**
Complementarity and Cross-Selling

Insurance

Retail

Asset Management

Wholesale

Citigroup?