This course offers an overview of international financial markets, including the basic elements of commercial and investment banking. The course focuses on two themes: first, an examination of the determinants of key international financial market prices (spot and forward exchange rates, currency option prices and swap rates), important pricing relationships and the characteristics of innovative financial products, and second, on the determinants of competitive performance among the players in the international financial services industry, covering a range of commercial and investment banking activities carried out internationally.

The first part of the course (Levich) begins with an overview of the institutional and organizational characteristics of the foreign exchange market. We review the basic arbitrage conditions that are relevant for international financial markets and then apply them to the case of several recent product innovations. Next, we cover the theory of efficiency as applied to the international financial market. We review the empirical evidence regarding the behavior of exchange rates and the efficiency of these markets, and examine the implications of these results for exchange rate forecasting. We then turn to specific segments of the international financial market — offshore deposit and bond markets, foreign currency options, and interest rate and currency swaps. Again we focus on the theoretical determinants of prices, the formulation of empirical tests for pricing and efficiency in these markets, institutional features of the markets, and other key issues for private agents and public policymakers.

The second part of the course (Walter) begins with a brief discussion of the international banking environment — the importance of factors affecting international corporate, institutional and individual financial services in global money and capital markets. We attempt to determine sources of competitive strength, market share, profitability, growth and similar dimensions of performance by financial institutions in the global marketplace. Specific sessions cover criteria for selecting bankers in providing short-term funding, international equity finance, mergers and acquisitions, project financing, and regulatory questions facing international banks and securities firms.

There follows a discussion of competitive performance in the international commercial and investment banking industry. Factors affecting top management decisions on whether and how to service international markets, and the implications for the structure of commercial banks and securities companies themselves, are examined.
through case analyses. Emphasis is also placed on country risk assessment and the
dynamics of competition in international financial services.

Instructors:

RICHARD M. LEVICH is Professor of Finance and International Business at the Stern
School of Business, New York University, and a Research Associate at the National
Bureau of Economic Research.

INGO WALTER is the Charles Simon Professor of Applied Financial Economics and
Director of the Stern Global Business Institute at New York University, and holds a joint
appointment as Professor of International Management at INSEAD in Fontainebleau,
France.

Pedagogy:

The course consists of lectures/discussions, exercises, and case analyses
allowing students to apply principles developed in class to actual international commercial
and investment banking situations.

Schedule:

Each of the "Topics" listed in the outline below normally covers a half-day of in-
class work. The remainder of each day is allocated to reading and preparation of
exercises or case discussions, individually and in groups.

Readings:

Reading assignments are made from the following books:


Ingo Walter, Mergers and Acquisitions in Banking and Finance (New York: Oxford
University Press, 2004).

Some readings are marked with an asterisk (*) indicating that they are not required
but copies will be available through the Institute’s library or from Professor Lehment.

Student Evaluations:

The course grade will be determined as follows: Cases 30%, Final examination 70%.
SECTION I [Prof. Richard M. Levich]

Topic 1 — Monday 12 January 2004, 09.00 - 12.00

The Foreign Exchange Market, Market Microstructure and Financial Innovation

1. Foreign exchange market participants
2. Institutional features, dealing risks
3. Market size, growth, trading patterns
4. Topics in market microstructure
   a. Quote shading versus inventory adjustment
   b. Sources of trader profits
   c. Competition and the bid-ask spread
5. Innovations based on covered interest arbitrage
   a. Long-term forward contracts
   b. Swap-driven issues
   c. Synthetic commercial paper

Readings: Levich, Chapter 3.


Assignment: None
Topic 2 — Tuesday, 13 January 2004, 09.00 - 12.00

**Efficiency of Foreign Exchange Markets and Forecasting Exchange Rates**

1. Theory of exchange market efficiency
2. Technical trading models
3. Trading models and the currency overlay
4. A taxonomy of approaches to forecasting exchange rates
5. Forecasting exchange rate jumps and crashes
6. Forecasting exchange rates in the long run
7. Forecast performance evaluation

Readings: Levich, Chapters 7 and 8.


Assignment: Ford Motor Credit Company

Topic 3 — Wednesday, 14 January 2004, 09.00 - 12.00

The Offshore Markets: Eurocurrencies and Eurobonds

1. Eurocurrencies
   a. First principles - credit creation, institutional setting
   b. Market size, location of offshore centers
   c. Determination of Eurocurrency deposit rates
   d. Risks of Eurocurrency deposits
   e. Competitive responses to offshore markets

2. Eurobonds
   a. Background - market dimensions, currency composition
   b. Regulatory and institutional features
   c. Primary market - competitive conditions, the gray market
   d. Problems and risks - excess competition, conflicts of interest
   e. Pricing of Eurobonds, arbitrage opportunities
   f. Global bond funds, with and without currency hedging

Readings: Levich, Chapters 9, 10 and 14


Assignment: None
Topic 4 — Thursday, 15 January 2004, 13.30 - 16.30

Foreign Currency Options

1. First principles — Terminology, contract specifications
2. Pricing of Currency Options
   a. Discrete time binomial approach
   b. Continuous time lognormal approach
   c. Options on spot and options on futures
   d. The impact of early exercise
   e. Pricing relationships: put-call-forward parity
3. Estimation of spot currency volatility
   a. Historical estimates
   b. Implied volatility
   c. Time varying volatility
   d. Practical problems with empirical estimates
4. Empirical studies of pricing models and efficiency
   a. Options on spot - Philadelphia Exchange
   b. Options on futures - Chicago Mercantile Exchange
   c. Alternative models considered - the 'pure jump' process
5. Management of trading position risks
   a. Delta hedging
   b. Gamma and Theta risk

Readings: Levich, Chapter 12


Assignment: "Gifts from FX Students"
Topic 5 — Friday 16 January 2004, 09.00 - 12.00

Currency and Interest Rate Swaps

1. Background - Origins of swaps, comparative advantage
2. Market size, market structure
3. Institutional features - accounting treatment, notional value, Master Swap Agreement
4. Cash flow requirements in interest rate and currency swaps
5. Risks of swaps
6. Risk measurement - amortization and diffusion effects
7. Applications of swaps
8. Pricing of swaps

Readings: Levich, Chapter 13.


Assignment: None
SECTION II [Prof. Ingo Walter]

Topic 6 — Monday 19 January 2004, 09.00 - 12.00

Reconfiguration of Global Commercial and Investment Banking

Developments in international debt and equity markets
Deregulation
Institutionalization
Securitization
Globalization
Technological change in the financial infrastructure
Cross-border exposures -- tracking and valuation
Problems of regulation and risk control

Readings: Smith & Walter, Preface and Chapters 1 12 and 13; Walter, Chapter 1

Topic 7 — Tuesday 20 January 2004, 09.00 - 12.00

Loan Syndications and Project Finance

Principles of international bank finance
International versus domestic credits
Commercial paper and Euro-CP
Alternative forms of medium-term international loans and revolving credit lines
Straight medium-term lending and loan syndication
Global bond financing
Convertibles and warrants
Asset-based securities

Readings: Smith & Walter, Chapter 5 and 6.

Case Assignment: “Hong Kong Disneyland”
Topic 8 — Wednesday 21 January 2004, 09.00 – 12.00

International Equity Finance, Mergers and Acquisitions

Primary international equity markets
Secondary markets for equity securities
Cross-border portfolio considerations
U.S., European and Japanese investor objectives
Arranging new equity issues
Worldwide equity infrastructure
Privatization programs
Foreign acquisitions verses green-field projects
Mergers and acquisitions
Assessment of risks and returns
Role of the investment banker

Readings: Smith & Walter, Chapters 7, 8 and 9.

Case Assignments: “The Acquisition of Martell” and “Allianz AG”

Topic 9: — Wednesday 21 January 2004, 14.00 – 17.00

Global Asset Management

The Global investor
Pension funds
Mutual funds
Private clients
Insurance companies
Portfolio performance
Structural change

Readings: Smith & Walter, Chapters 10 and 11.

Case Assignment: “UBS Private Banking”
**Topic 10** — Thursday 22 January 2004, 09.00 - 12.00

**Competitive Strategy and Execution in International Financial Markets**

- Review of the theory of multinational enterprise
- Application to international banking
- Criteria of competitiveness
- Price and non-price competitive variables
- Measures and determinants of performance
- Barriers to international banking competition
- Market positioning
- Management philosophy
- Geographic vs. industry design
- Competing for multinational corporate clients
- Profit attribution
- Resource management and allocation
- Integrated risk management and control

**Readings:** Smith & Walter, Chapters 14 and 15; Walter, Chapter 6.

**Case Assignment:** “Citigroup”

**Final Examination**