INTRODUCTION TO THE STUDY OF INTERNATIONAL FINANCIAL MARKETS

International Finance as a "Game"

The Changing Financial Landscape

  The Expanding Menu of Financial Choices
  Greater Volatility as a Feature of Financial Markets
  Increased Competition Within and Among Financial Markets

Major Themes

  Prices in International Financial Markets
  Policy Issues in International Financial Markets

Challenges in the Study of International Financial Markets

  The Importance of Foreign Exchange Outside of the United States
  The Importance of Foreign Exchange in the United States
  The Study of International Financial Markets: More Demanding
  The Practice of International Financial Management: More Demanding

Richard M. Levich
"International finance is a game with two sets of players: the politicians and bureaucrats in national governments, and the presidents and treasurers of giant, large, medium, and small firms." Robert Z. Aliber, The International Money Game, (1987, p. 3).

1. National policymakers have dual objectives
   
   - Manage home economy (e.g. achieve growth, full employment, income distribution, export or inflation targets, etc.)
   
   - International commitments (e.g. pegged exchange rate, exchange rate variability [EMS], current account balance, etc.)
   
   - These objectives often lead to inconsistencies
     
     \[\Rightarrow\] Exchange rate changes are inevitable

2. Regulatory differences across countries and across markets
   
   - Private investors and firms take account of regulatory differences
     
     - Design new market places and securities to circumvent regulations, hedge undesired risks, improve financial efficiency, lower cost of financial intermediation
     
     - Search out lower regulated environments if risks and costs are not too great
   
   - Public policymakers also take regulation into account
     
     - Respond to competition from other, low regulatory markets
     
     - Concern that negative spill over effects from low regulation markets may jeopardize safety and soundness of other markets
3. The game of international finance is dynamic - it goes on forever

- Investors continuously monitor the behavior of national policymakers, regulators, firms, and market prices

- Investors are searching for inconsistencies in
  - National policies
  - Market regulations
  - Market prices
  
  any of which could signal a profit opportunity or risky situation

- Both markets (countries) and issuers of securities (firms and sovereigns) build credibility by their actions

- The market has a long memory, reputations matter and change slowly
Dominance of the United States as a creditor nation (net supplier of savings to the world) has ended

Dominance of United States market place is challenged:

- U.S. has largest markets for equity, bonds and derivatives
- Other market places (London, Tokyo, Frankfurt, Singapore, + emerging markets) are gaining ground

Dominance of US$ is challenged:

- Other currencies (DM, ¥, ECU, and soon the Euro) are gaining favor
The Changing Financial Landscape:
The Expanding Menu of Financial Choices

A List from the 1960s:

Corporate issuers rely on bank financing, investment grade bonds, common equity shares.

Commercial banks and stocks exchanges are dominant

Primarily local (onshore) markets in local (domestic) currencies.

Forward contracts (mostly short term) for major industrial currencies

Futures contracts (again short term) for agricultural and industrial commodities

A List from the 1990s:

New financial contracts and instruments

Commercial paper, financial futures, options, swaps, index-linked securities
Financial futures on currencies, commodities, securities, interest rates, options, .... even the weather!
"Plain vanilla" products + "exotic" options and swaps
Longer maturities, lower-rated (junk) issuers

New financial market participants

Commercial banks challenged by investment banks, securities firms
Securities brokers (people) challenged by financial innovation (electronic trading)

New financial market places

Stock exchanges challenged by futures and options exchanges
Onshore market challenged by offshore markets (Euromarkets)
OECD markets challenged by emerging markets (until 1997)
Traditional market places (trading floors and pits) challenged by electronic trading
The Changing Financial Landscape:
Greater Volatility as a Feature of Financial Markets

The Bretton Woods system of pegged exchange rate collapses in 1973

- Under the floating rate system, exchange rate volatility increases substantially (See Figure 2.6 attached)

Oil price shocks of the 1970s and national policies trigger high and volatile inflation

- Substantial swings in nominal and real interest rates result (See Figure 2.12 attached)

The European Union (EU) nations attempt to align their inflation rates, interest rates, and exchange rates

- The Exchange Rate Mechanism (ERM) begun in 1979 suffers many set-backs, and a major break-down in 1992-1993
- Despite these repeated difficulties, the EU goes ahead with their plan for a single currency in Europe (the Euro will be the currency of the European Monetary Union)

Increased volatility in financial prices has led to

- Increased demands for financial forecasts
- Increased demands for new financial hedging (insurance) instruments

These new instruments may carry their own risks, such as

- Counterparty risk
- Liquidity risk
- Delivery risk
- Rollover risk
- "Model" risk
- Country risk
Fig 2.6

Exchange Rate Volatility
Average Absolute Month-to-Month Changes

Percentage

Jan 60-Oct 67  Nov 67-Feb 73  Mar 73-Sep 79  Oct 79-Aug 82  Sep 82-Mar 87  Apr 87-Jul 94

Figure 2.12

U.S. Real Interest Rates
T-Bill Returns - CPI, annual data

The Changing Financial Landscape:
Increased Competition Within and Among Financial Markets

Underlying cause: Financial activity is foot-loose, free to move nearly anywhere

Competition among countries for various financial service activities

- Underwriting
- Funds management
- Trading
- Back-office, administrative work

Competition among exchanges within a country

- Equity exchanges vs. futures and option exchanges
- Equity exchanges vs. over-the-counter exchanges
- Quote-driven exchanges vs. order-driven exchanges
- Traditional exchanges vs. electronic and internet exchanges

Competition among institutions

- Commercial banks
- Securities firms
- Money-center institutions vs. regional institutions
- Investment banks
- Insurance companies

Competition among regulators

- Who will regulate a new security? SEC, CFTC
- Who will set accounting standards? FASB, IASC
- Who will set bank capital adequacy standards? BIS, individual banks

- Functional regulation
  (same regulation for a product no matter who deals in it)

  versus Institutional regulation
  (regulations may differ from banks, to securities firms to insurance companies, even for the same product)

- Concern that competition will drive level of regulation (the Net Regulatory Burden) too low

- Concern that harmonized level of regulation could be set too high, or become non-responsive to further financial innovation
Major Themes: Prices and Policies

Prices in International Financial Markets

The Determinants of Prices (“How markets work”)

- How are prices of financial products related to fundamental macroeconomic variables?
- Impact of institutional arrangements and practices on market prices

The Relationship Among Financial Market Prices

- The importance of parity conditions and arbitrage
  - Covered Interest Parity
  - Put-Call-Forward Parity
  - Currency Swap Parity
- Correlation of price changes
  - An indicator of potential investment diversification gains
  - An indicator of possible hedging instruments
- Relationship between today’s forward rate and the future spot rate
  - An indicator of a risk premium
  - An indicator of possible speculative profit opportunities

The Nature of Price Changes in Financial Markets

- What determines price changes?
- Are successive price changes random (“random walk”) or is there a pattern?
- Distribution of price changes (Normal or non-Normal?)

Are Prices Set Efficiently?

- Do prices "fully reflect available information" or not?
Major Themes: Prices and Policies

Policy Issues in International Financial Markets

Policies for Individuals and Private Enterprises

- Should we forecast financial market prices? If so, how?
- Are financial markets efficient? Can we find bargains?
- What are the best strategies for international investment, or raising capital?
- How large are the risks of our financial positions?
- What are the benefits of hedging our financial risks?

Policies for Public Policymakers

- How do macroeconomic variables effect the exchange rate?
- How can we tell if an exchange rate is overvalued or undervalued?
- Are exchange rates excessively volatile? If so, how can we reduce volatility?
- Does foreign exchange intervention effect the exchange rate or volatility?
- What types of regulations should be applied to financial markets and market participants?
Challenges in the Study of International Financial Markets

The Importance of Foreign Exchange Outside of the United States

- The foreign exchange rate is usually considered "the most important price" in the economy
- Small economies are often highly open, and depend heavily on trade in goods and services
- Prices of many agricultural and basic commodities are set in US$, so an exchange rate change effects local prices

  ⇒ Impact of international investment community may be substantial

The Importance of Foreign Exchange in the United States

- The US was a large fairly closed economy, but it is becoming "smaller" in relative terms and more open

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<tr>
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<th>1950</th>
<th>1994</th>
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<tr>
<td>US GDP (1987 dollars)</td>
<td>$1.4 trillion</td>
<td>$5.3 trillion</td>
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<td>Share of world GDP</td>
<td>about 60%</td>
<td>28.5%</td>
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<tr>
<td>Exports + Imports as share of GDP</td>
<td>6.8%</td>
<td>20.1%</td>
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- Financial impact of exchange rates on US multinational firms
- US Government debt is $5.0 trillion, of which $3.3 is in marketable securities

  □ Foreigners hold $826 billion (26%) of total marketable US government securities

  ⇒ Foreigners have a major stake in the macroeconomic well-being of the US, and US policymakers must take account of these stakeholders.