#### **Columbia Business School**

# B8357 - The Money Markets: Domestic and International Prof. R. Philip Giles, Autumn Term, 1999

This course combines the institutional study of money markets with economic theory. It will emphasize the interdependence of economic factors and will examine the many roles of arbitrage in determining market equilibrium. The focus will be on short-term instruments in the cash and futures markets, both for U.S. and international markets. However, because of the vast derivatives market, it is no longer possible to separate the money markets from the capital markets. The roles of innovation and of regulation in the development of new financial instruments and practices will be addressed. One major goal of this course is to illustrate market interdependence and integration.

The *Wall Street Journal* should be read by each student **every day prior** to the class. Students will be expected to be aware of current financial events. Note that classroom participation forms part of the final grade and students should be prepared to be called upon in class for a brief discussion.

The assigned reading materials are from the text and recent journal articles. The required text, available from the Columbia Bookstore, is *Money Market and Bond Calculations*, Irwin, 1996 by Marcia Stigum and Franklin Robinson. In addition, selected chapters will be used from a second Stigum text, *The Money Markets*, Dow Jones-Irwin, 1990.

A readings book will be available for most of the journal articles, the remainder will be provided in class. Relevant chapters of the 1990 Stigum text will be made available in the readings book.

It will be assumed that each student has access to a financial calculator (HP12, 17 or 19 or equivalent) with the ability to perform calendar calculations

The course grade will be derived as follows, with approximate weights:

Classroom participation
Homework Problems
A Midterm Examination
A Final Examination
40%

Office Hours: Monday, Wednesday, 11:30 – 12:30 or by appointment.

Page

## Session Topic

- 1 08-Sep Overview: Money Market Structure and Instruments
- 2 13-Sep Guest Speaker: "\$9 Billion In and Out in 1 Day"
- 3 15-Sep Overnight Money Markets
- 4 20-Sep Money Market Instruments (T-bills, Commercial Paper, etc.)
- 5 22-Sep The "Euro11" and Eurodollar Markets
- 6 27-Sep Overview: Money Market Yields
- 7 29-Sep Asset-backed Commercial Paper
- 8 04-Oct Cash Market Yield Calculations I
- 9 06-Oct Money Market Yield Curves
- 10 11-Oct Cash Market Yield Calculations II
- 11 13-Oct Bond Pricing Relationships
- 12 18-Oct Managing a Cash Market Portfolio
- 13 20-Oct MIDTERM EXAM
- 14 25-Oct The Interbank FX Market and Arbitrage
- 15 27-Oct Currency Futures Applications and Pricing
- 16 03-Nov Short-term Interest Rate Futures
- 17 08-Nov Investors in the Money Markets
- 18 10-Nov Money Market Mutual Funds
- 19 15-Nov Hedging a Cash Market Position
- 20 17-Nov Futures Market Cash Market Linkages I
- 21 22-Nov Interest Rate Risk Hedging with Forward Rate Agreements
- 22 29-Nov Futures Market Cash Market Linkages II
- 23 01-Dec Derivatives, Synthetic Securities, Money Market Capital Market Integration
- 24 06-Dec Review and Wrap up

B8357: The Money Markets, Autumn 1999

- 1. Overview: Money Market Structure and Instruments
  - \*Stigum, Marcia, *The Money Market*, Chapters 3 and 4 (Stigum1).
- 2. Guest Speaker: "\$9 Billion In and Out in 1 Day"
- 3. Overnight Money Markets
  - Stigum1, Chapter 12, pp. 537-566, 572-574.
  - Stigum1, Chapter 13, pp.575-600.
  - Scott-Quinn, Brian and Julian Walmsley, *The Repo Market in Euro: Making it Work*, ISMA, 1997, Part 2, pp. 67-79.
- 4. Money Market Instruments (T-bills, Commercial Paper, etc.)
  - Stigum1, Chapters 14 (pp. 631-69) and 22.
- 5. The "Euro11" and Eurodollar Markets
  - Scott-Quinn, Brian and Julian Walmsley, *The Repo Market in Euro: Making it Work,* ISMA, 1997, Part 1, pp. 16-33, 56-66.
  - Stigum1, Chapters 7 (pp. 199-256) and 18 (871-74).
- 6. Overview: Money Market Yields
  - Stigum, Marcia and Franklin Robinson, *Money Market and Bond Calculations*, Chapters 3 and 4 (**Stigum2**).
- 7. Asset-backed Commercial Paper
  - Link to Fitch-IBCA
- 8. Cash Market Yield Calculations I
  - Stigum2, Chapters 6 and 7.
- 9. Money Market Yield Curves
  - Garner, C. Alan, "The Yield Curve and Inflation Expectations," *Economic Review*, Federal Reserve Bank of Kansas City, Sept/Oct, 1987, pp. 3-15.
  - Rowe, Timothy D., Thomas A. Lawler and Timothy Q. Cook, "Treasury Bill Versus Private Money Market Yield Curves," *Economic Review*, Federal Reserve Bank of Richmond, July/August 1986, pp. 3-12.
- 10. Cash Market Yield Calculations II
  - Stigum2, Chapters 8 and 9.
- 11. Bond Pricing Relationships
- 12. Managing a Cash Market Portfolio
- 13. MIDTERM EXAM
- 14. The Interbank FX Market and Arbitrage

• Throop, Adrian W., "International Financial Market Integration and Linkages of National Interest Rates, *Economic Review*, Federal Reserve Bank of San Francisco, Number 3, 1994, pp. 3-18.

## 15. Currency Futures Applications and Pricing

- Chalupa, Karel V., "Foreign Currency Futures: Reducing Foreign Exchange Risk," *Economic Perspectives*, Federal Reserve Bank of Chicago, Winter, 1982, pp. 3-11.
- Fieleke, Norman S., "The Rise of the Foreign Currency Futures Market," *New England Economic Review*, Federal Reserve Bank of Boston, March/April, 1985, pp. 38-47.

#### 16. Short-term Interest Rate Futures

- \*Kuprianov, Anatoli, "Short-Term Interest Rate Futures," *Economic Review*, Federal Reserve Bank of Richmond, September/October 1986, pp. 12-26.
- 17. Investors in the Money Markets\*
  - Stigum1, Chapters 11, 15.
- 18. Money Market Mutual Funds
- 19. Hedging a Cash Market Position
- 20. Futures Market Cash Market Linkages I
  - Stigum, Marcia, Money Market Calculations: Yields, Break-evens and Arbitrage, Dow Jones-Irwin, 1981, Chapter 11.
  - Abken, Peter A., "Using Eurodollar Futures Options: Gauging the Market's View of Interest Rate Movements," Economic Review, Federal Reserve Bank of Atlanta, March/April, 1995, pp. 10-30.
  - Carlson, John B, Jean M. McIntire, and James B. Thomson, "Federal Funds Futures as an Indicator of Future Monetary Policy: A Primer," Economic Review, Federal Reserve Bank of Cleveland, Quarter 1, 1995, pp. 20-30.
- 21. Interest Rate Risk Hedging with Forward Rate Agreements
- 22. Futures Market Cash Market Linkages II
  - Brown, Keith C. and Donald J. Smith, *Interest Rate and Currency Swaps: A Tutorial*, Institute of Chartered Financial Analysts, 1995, pp. 61-73.
  - Kawaller, I.G. and T.W. Koch, "Cash-and-Carry Trading and the Pricing of Treasury Bill Futures," *The Journal of Futures Markets* 4:115-23 (Summer 1984).
- 23. Derivatives, Synthetic Securities, Money Market Capital Market Integration
  - "Synthetic Money Market Instruments: A Short Term Investment," *Market Perspectives*, Chicago Mercantile Exchange, October 1983.
  - "Creating Synthetic Treasury Bills," *Market Perspectives*, Chicago Mercantile Exchange, September 1986.
  - "Identifying Cheap Sources of Funds," *Market Perspectives*, Chicago Mercantile Exchange, April 1987.
- 24. Review and Wrap up