

GLOBAL MACROECONOMICS & FINANCIAL MARKETS

Credits: Three

Area: Economics and Social Sciences

Term : IV

Duration of Term: June 2014 to August 2014

Elective offered only to PGP

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COURSE OBJECTIVE: This course is largely about the determinants of global financial market prices (mainly exchange rates and equities, but also others – oil, commodities), with emphasis upon the impact of interest rate decisions by central banks (monetary policy) and other macroeconomic factors. This course complements the subject of international corporate finance, which deals specifically with the pricing of Forex based instruments. To find out more about the course, contact those who took it last year.

A major part of the value addition from the course comes from integrating the project SAAP with the course content. Details of “Strategic Asset Allocation Project” (SAAP) are given on the last page. This integration provides a broad exposure to, and concrete understanding of, ongoing developments in the global economy and financial markets. While the narrow goal of the project is to maximize portfolio returns, the broader takeaway is the exposure to the global macroeconomy, which matters for a wide range of business decisions.

Reading Material: The course material will be largely based on my class notes and excerpts from Jeremy Siegel’s (Professor of Finance, Wharton) book “Stocks for the Long Run”, 4th Edition. The class notes correspond to Chapters 18 and 19 of my textbook in progress “Macroeconomics: An Integrated Financial Approach” (Detailed Table of Contents is found on the website). In addition to incorporating standard material in international monetary economics and finance, for a few topics, the notes are based on my publications put up on my website economicsperiscope.com. The dates of some articles of mine that will be covered in detail are April 1995, April 1996, May 2007, November 2007 and subsequent articles on Rupee in 2007-08. (Browsing through these articles will give you a reasonably good idea of some of the course content). References for other readings will be provided in the relevant sections of the notes that are handed out. I will also cover the outlook for the future of the Euro as a currency based on the Greek and general European situation, drawing upon the collapse of sterling in the ERM (See September 1992 entry on my website).

EVALUATION: Midterm (50%) SAAP project (30%) and Final (20%)

The final exam will be closely related to the project. Since the project occurs in real time, there may be a short quiz based on some important development and other marks adjusted accordingly. There will be upto a maximum of 5% bonus for class participation. The mechanics of this will be discussed in class.

PREREQUISITES FOR THE COURSE: None.

ATTENDANCE POLICY: 75% (15 Classes) attendance required. If there is shortfall, 1% of marks will be deducted for each class cumulatively. Beyond 5 classes, for the first class missed, you lose 1%, for the second, you lose 2%, etc. Thus, if you miss 3 classes, you will lose a total of 6% upto 55% for ten classes missed. Beyond that, there is no penalty.

COURSE OUTLINE: The weekly outline below will be followed approximately. Some topics may take more than the allotted time and others less, but the differences should even out.

PART 1 Global Macroeconomy and Relevant Concepts

Week 1: Systems of Exchange Rates and links to Foreign Exchange (Current and Capital Account) convertibility. The changing international monetary system since World War II, evolving role of IMF and changes in Capital Account policies after Bretton Woods. Special Drawing Rights). India's 1950s FX License Raj, The BoP crisis and 1991 liberalization, Exchange rate and convertibility policies from 1993 onwards.

Week 2: Balance of Payments (BOP) accounting and double entry bookkeeping. Mechanics of Foreign Exchange (FX) Payments. Details of and trends in India's BOP.

Week 3: Interaction between BOP, Economy and Money Supply. Analyzing macroeconomic adjustments under Fixed and Floating Exchange Rates (Elasticities and Absorption approaches). Impact of FX reserves on money supply and Valuation Effects in Central Bank Balance Sheet. Sterilization and Management of FX Reserves by Central Banks.

PART II: GLOBAL FINANCIAL MARKETS

SAAP BEGINS Details at end

Week 4: Functioning of the Forward and Spot markets, Features of the global FX and related financial markets, Parity conditions (Covered and Uncovered Interest Parity (UIP), The Impossible Trinity)

Week 5: Portfolio management approaches linked to UIP (Exploiting failures of UIP via the carry trade, the Dollar/Yen exchange rate and related applications, UIP and impending devaluations, case study of ERM 1992 Sterling and Lira collapse, investigating quasi carry trades) Evolution of Euro as a currency.

MIDTERM

Week 6: Changing approaches to Exchange rates: From portfolio approaches to News, random walk and efficient markets approaches, statistical study of impact of employment news on exchange rates and related markets. Profitable trading rules and violations of market efficiency.

Week 7: Links Between Equity markets, monetary policy and exchange rate movements (Evidence from UK equity prices, Japan's 2013 stock market rebound). Implications of the failure of UIP and of equity-currency linkages for portfolio investors' hedging decisions.

Week 8: Links between Purchasing Power Parity, Real Exchange Rate, Financial market and macroeconomic equilibrium conditions. Assessing elasticity versus absorption approaches to BOP imbalances. India's Exchange Rate policy from 2003-2012: From Real Effective Exchange Rate targeting to managing volatility. A case study of the Impossible Trinity and Rupee Rise (April 2007) and associated evaluation of policy options.

Week 9 and 10: Latest Developments, Special Topics and Project Presentations.

FINAL

Details of SAAP project on next page.

STRATEGIC ASSET ALLOCATION PROJECT

Evaluation: 10% Written Report and 10% Presentation (or Project Question) and 10% Result

I Objective of Project:

The specific goal is to invest the starting sum of \$100,000 in either equities or in 'cash' i.e. 91 day Treasury bills in two different countries: USA, and India so as to maximize the \$ amount as of the closing day of the project, which is five weeks later. SAAP's broader objective is to provide exposure to, and some understanding of the various economic and other factors that influence exchange rates.

In forex markets, one month is a medium to long term-term horizon. In very short-term currency trading, profits are largely made by quasi-arbitraging across different buying and selling rates; speed and numerical accuracy always matter. Strategic asset allocation is quite different. It entails making judgements and forecasts, first, about the outcome of upcoming economic and other factors and, second, their impact on financial market prices - equities, interest rates, and currencies - over short or long horizons. Typically there would be just a few events that substantially move markets over a month. Quick decisions based on anticipating, interpreting and/or reacting to these few events are required, but not every minute. While outcomes are essentially random, good strategy involves a consistent and well-thought out approach to choosing a portfolio. It may entail only sticking to the original portfolio without doing any trades. Therefore, to enable you to focus long-term, only three trades, i.e. a maximum of three trading days are allowed after the initial allocation.

II Guidelines and Instructions for Written Report:

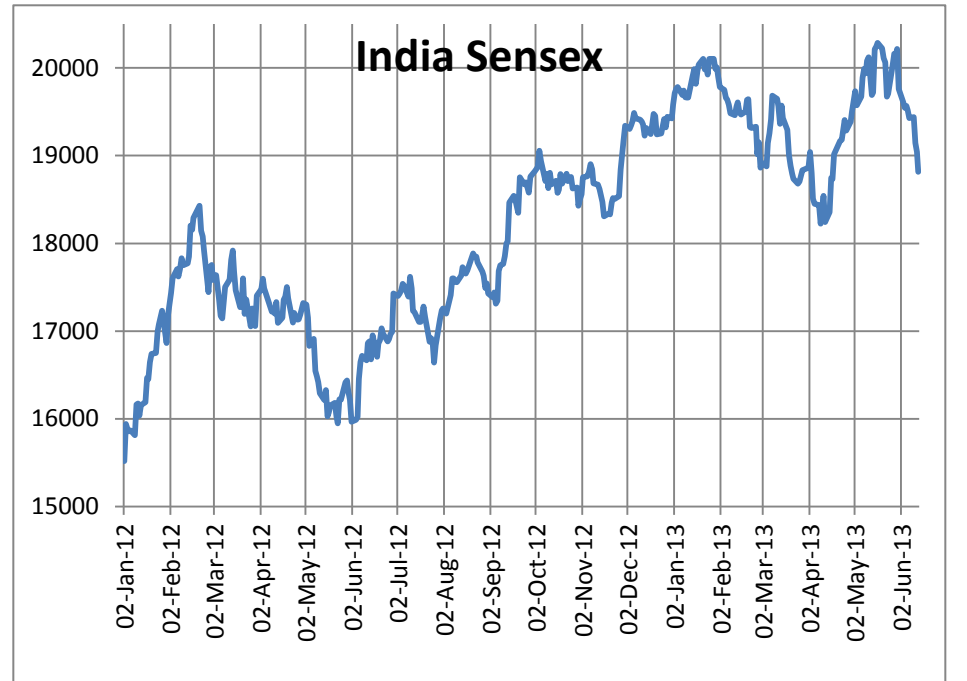
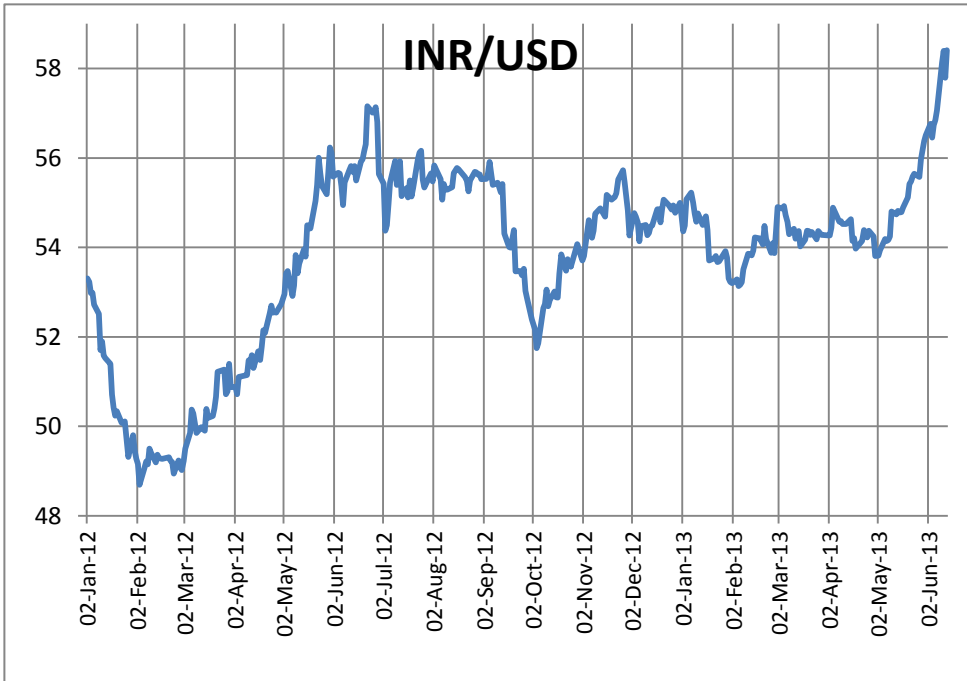
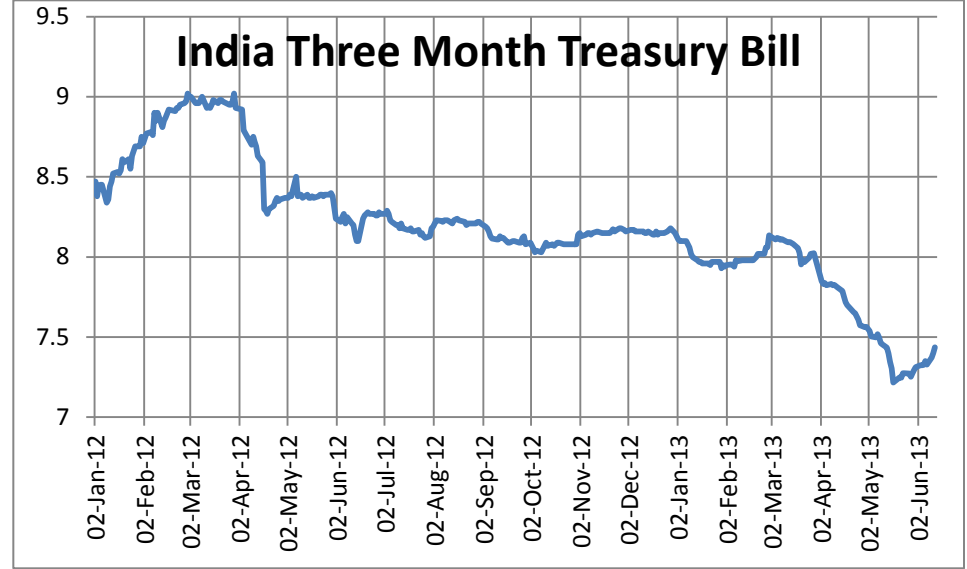
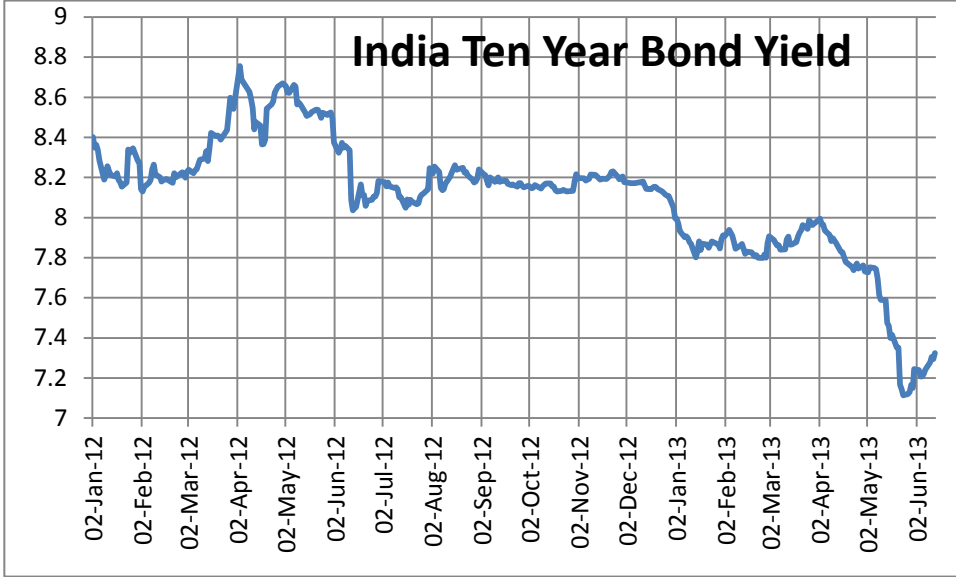
The purpose of the report is twofold. First, to justify your initial investment allocation and provide a rationale for the subsequent trades (if any) you make during the period. The marks given for writing the report will be completely independent of the outcome. A well-written report should provide a good explanation of the rationale for your decisions at that time, backed up by statistical or other analysis of data, if such analysis is warranted and possible.

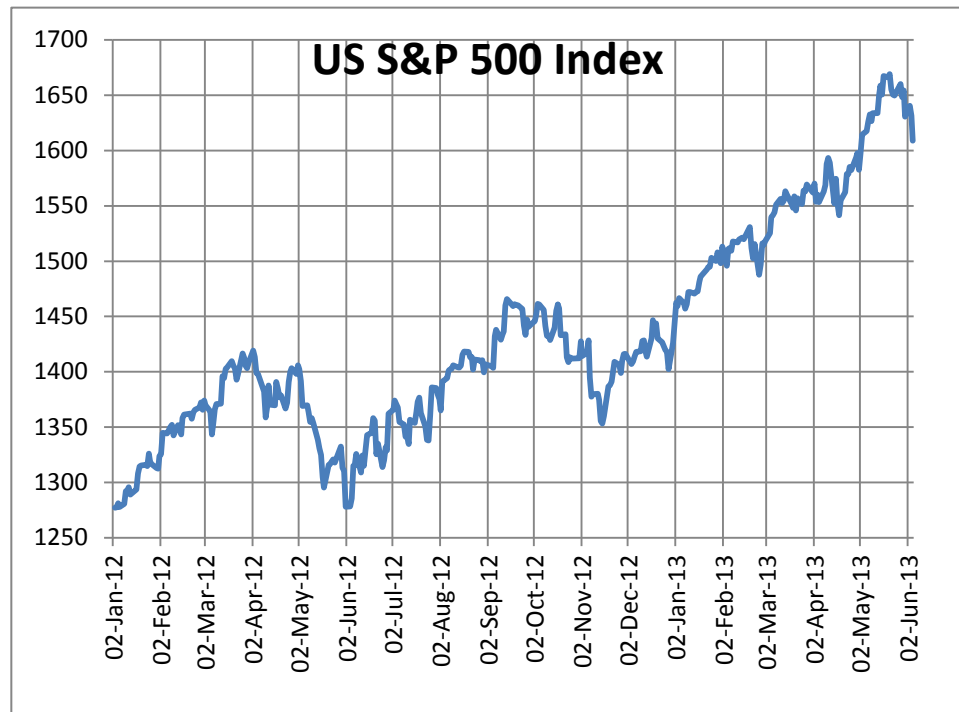
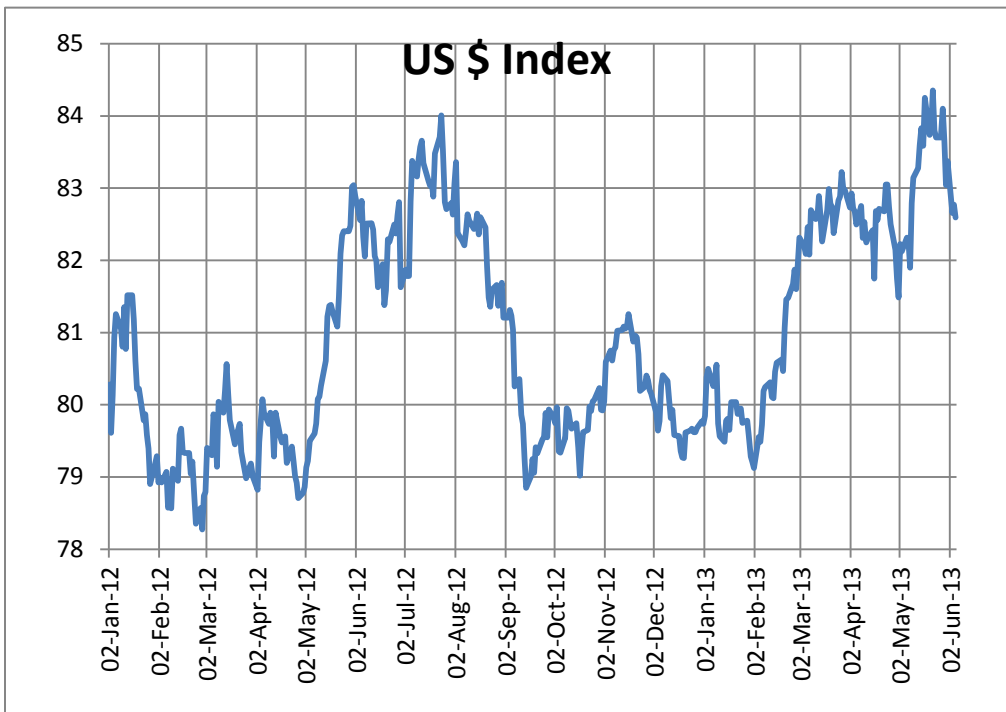
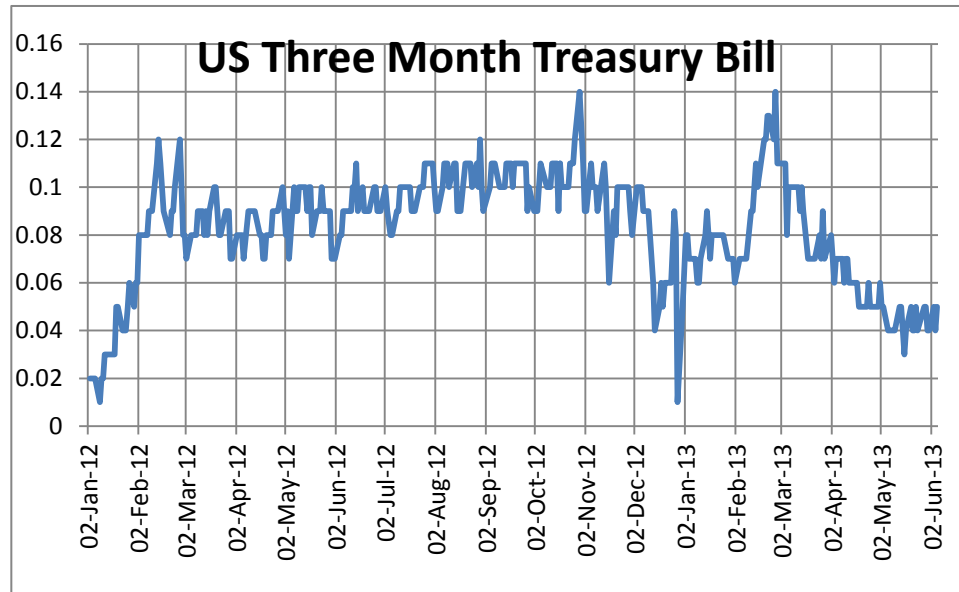
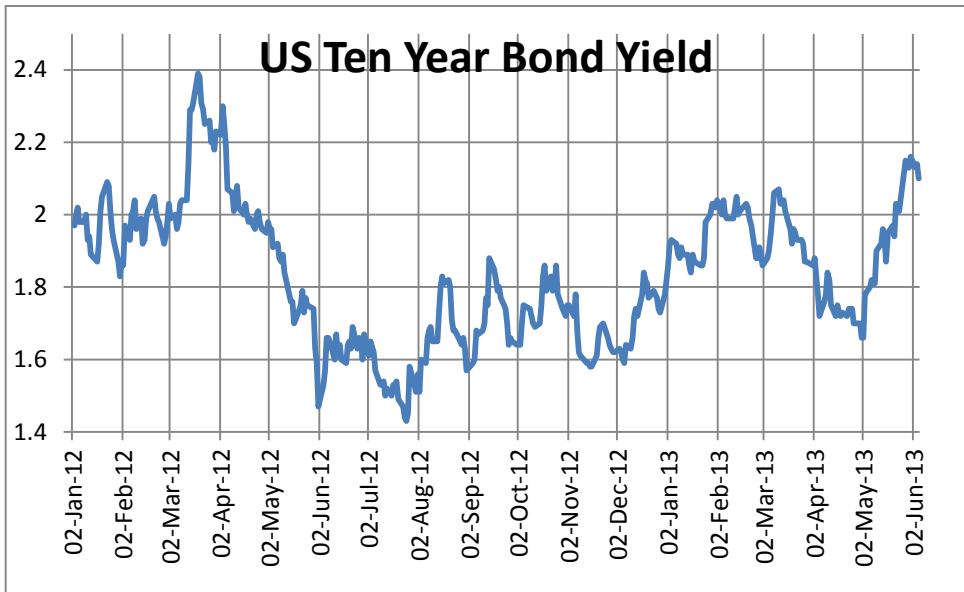
The second purpose of the report is to get you to follow the financial markets during this period, and, if possible, analyze some noteworthy development during this time. You should be reading the market commentary accompanying the data on the financial news screens. The number of such services is increasing rapidly. Some of the older and established ones are Reuters.com, Bloomberg.com, Yahoo Finance, Financial Times (FT.com). A word of caution - diminishing, and even negative returns, sets in for market analysis, with a huge excess of commentary chasing a small amount of important news and activity.

The Reuters column reproduced in Business Line (hindubusinessline.com) is an adequate account of daily market developments. Also the Monday report 'The Markets Last Week' in Business Line is a compact weekly summary in convenient format. The London Economist and Euromoney reports and analysis are excellent and recommended reading for the 'big picture'.

MAXIMUM WRITTEN TEXT - 5 pages, double spaced, Charts and Tables Extra.

The detailed SAAP instruction and guidelines will be provided in a separate handout when the course starts.





Chapter 18: Table of Contents (For this fourth term course, skip the marked sections)

- 18.ALPHA: System of Exchange Rates and Link to Foreign Exchange Convertibility
 - 18. ALPHA.1 Current Account Convertibility
 - 18. ALPHA.2 Features of External Transactions Distinct from Convertibility
 - 18. ALPHA.3 Capital Account Convertibility
 - 18. ALPHA.4 Detailed Classification of Exchange rate Regimes
- 18 BRAVO The International Monetary Systems and its Changes
 - 18.BRAVO.1 CURAC Policy: From FX controls to post Communist era liberalization
 - 18. BRAVO.2 From Fixed to Floating: Breakdown of Bretton Woods
 - 18. BRAVO.3 The multilateral organizations **SKIP**
 - 18. BRAVO.3.1 Failure of orthodox development economics and the changing role of World Bank
 - 18. BRAVO.3.2 Changing Composition of Capital Flows
 - 18. BRAVO.4 The IMF's Funding Mechanisms and Quotas **SKIP**
 - 18. BRAVO.5 Special Drawing Rights (SDR) **SKIP**
 - 18. BRAVO.6 The failure of the SDR **SKIP**
 - 18. BRAVO.7 The Role of IMF after Bretton Woods
 - 18. BRAVO.8 Changing Policies towards full CAPAC
 - 18. BRAVO.9 A Chronology of Major IMF Events
- 18.Charlie: Balance of Payments Accounting
 - 18.Charlie .1 What is the BOP All About?
 - 18. Charlie. 2 Categories and Sub Categories of BOP
 - 18.Charlie. 3 Connections Between the Main Categories
 - 18.Charlie.4: The Mechanics of Forex Payments
 - 18.Charlie.5: Double Entry Bookkeeping
 - 18.Charlie.6: Constructing a Hypothetical BOP Statement: **SKIP**
 - 18.Charlie.7: External Debt
 - 18.Charlie. 8: Items and Trends in India's BOP
 - 18.Charlie.9: Three Categories in United States BOPA
- 18.Delta: Interaction between BOP, Economy and Money Supply
 - 18.DELTA.1 Review of Links of BOPA to National Income Accounts
 - 18.DELTA.2 Adjustment under Flexible Exchange Rates
 - 18.DELTA.3 Adjustment under Fixed Exchange Rates
 - 18. DELTA.4 Impact of Rise of FX Reserves on Money Supply and Economy
 - 18. DELTA.5 The Inverted Pyramid of Money Supply
 - 18. DELTA.6 Sterilization
 - 18. DELTA.7 Valuation Effects of Exchange Rate Changes
 - 18. DELTA.8 Management of FX Reserves By Central Banks
- 18.ECHO India's Exchange Rate and FX Policies and their Impact since Independence
 - 18.ECHO.1 India's FX License Raj: The Era of Lofty Failure **SKIP**
 - 18.ECHO.2 Diverging EXR and Convertibility Policies (1965-1989) **SKIP**
 - 18.ECHO.3 The 1991 BOP Crisis Followed by Big Bang Liberalization **SKIP**
 - 18.ECHO.3.A The New Economic Policy of 1991 **SKIP**
 - 18.ECHO.3.B: Evaluating the Structural Adjustment Program **SKIP**
 - 18.ECHO.3.C: CAPAC policies from the mid 1990s:
 - 18.ECHO.4 Exchange Rate Developments from the mid 1990s
 - 18. ECHO. 5 Convertibility and EXR Arrangements in Sri Lanka, Bangladesh and Pakistan **SKIP**:

CHAPTER 19: GLOBAL FINANCIAL MARKETS \ VM

Wednesday, May 22, 2013

PART AMAZON: THE GLOBAL FOREIGN EXCHANGE MARKET

19. A.1: FX Participants/ Global/India 19.A.2: Various Spot FX Rates 19.A.3 The BIS Turnover Survey
 19.A.4: Forwards (Evolution), Futures and Others 19.A.5 Covered Interest Parity 19.A.5.1 CIP and Taxes
 19.A.6 From Interest Parity to Impossible Trinity A.6.1 The Rupee Episode of 2007
 19.A.7 Uncovered Interest Parity (UIP) 19.A.8 UIP and Devaluation/ERM
 19.A.9 Characterizing Time Periods 19.A.10 The Basic Carry Trade

PART BEAS: APPROACHES TO EXCHANGE RATE AND ASSET PRICE DETERMINATION

- 19.B.1 The Elasticities Approach 19.B.2 The Absorption Approach
 19.B.3 The Portfolio and Monetary Approaches 19.B.4 From Structural Models to Random Walk Approaches
 19.B.5 Random Walk, Efficient Markets, Rational Expectations & NEWS Approaches. 19.B.5.1: Precursor of Rational Expectations
 19.B.6: Efficient Market Hypothesis and Rise of Passive Investing. 19. B.7 Reconciling EMH with Superior Performance

PART CHENAB: IMPACT OF NEWS ON EXCHANGE RATE AND FINANCIAL MARKETS

- 19.C.1: Formation of Data News and Event Studies 19.C.1.1 Impact of Fundamentals Versus News About Fundamentals
 19.C.2: The Monthly US Employment Report: Details of News Formation.
 19.C.3: Impact of Employment News on Interest Rates, Exchange Rates (EXR) and Equities.
 19.C.4: Excess Sensitivity of EXR to News. 19.C.4.1: Forward Markets and Interest Rate Change
 19.C.5: Spot Currency Response to Interest Rate Movements: a Quasi UIP Phenomenon?

PART DANUBE: PROFITING FROM MARKET INEFFICIENCY

- 19.D.1: The Colossal Failure of UIP 19. D.1.1. Assessing the Profitability of Carry Trade.
 19.D.2: Calendar Effects, Profit Taking and Other Anomalies.
 19.D.3: Technical Trading with Emphasis on the FX Market.
 19.D.4 Behavioral Finance and Investor Psychology
 19.D.5: A Trading Rule Based on Fundamentals (VM) 19.D.5.1 Irrelevance of 'Peso' Problems

PART EUHRATES: MONETARY POLICY, EQUITIES AND EXCHANGE RATES:

- 19.E.1: Good Data News and the Dotcom Boom
 19.E.2: Ultra Sensitivity of Equity Prices to Liquidity. 19.E.2.1: Should Investors Focus on Macro Data?
 19.E.3: Animal Spirits versus Banker's limits. 19.E.3.1: Monetary Policy & Reversal of Carry Trade (LTCM).
 19.E.4: Equity Investors and the Failure of Uncovered Interest Parity
 19.E.5 Role of EXR in Big Bubbles 1.The 1927 Coordination 2. The 1987 U.S Stock Market crash 3. The 1980s Japan's Nikkei

PART FRAZER: LONG TERM INVESTMENT STRATEGIES

- 19.F.1: Random Walk, Buy and Hold, and the Risk Premium Puzzle
 19.F.2: Hedging FX Risk in Overseas Transactions (India Foreign Currency Convertible Bonds case study)
 19.F.3: Stocks for the Long Run or Wrong Run?

Consider the data below. The RBI tightened liquidity through various moves on 24 July Wednesday to defend/support the rupee. As can be seen below, the short and long rates went up and the rupee stabilized. (It is standard policy for central banks to try to defend their currencies by hiking rates etc.) Freeze the data and events to as of Friday 26 July i.e. ignore any information and inferences from this week's policy and financial market prices.

<u>Date</u>	<u>INR per \$</u>	<u>3MoTBill</u>	<u>10YearBond</u>	<u>Sensex</u>
Mon 22 July	59.73	8.57	8.09	20159
Tue 23 July	59.76	8.60	8.16	20302
Wed 24 July	59.13	9.67	8.41	20090
Thu 25 July	59.10	10.82	8.22	19804
Fri 26 July	59.04	10.55	8.15	19748
Fri 02 August	61.10	10.52	8.27	19164

(i) Focus only on financial markets (for a period of say maximum two-three weeks i.e. ignore macroeconomic factors that arise over, say, a monthly horizon and beyond). What is the main risk for the RBI of an overall strategy of supporting the Rs. by hiking interest rates and/or tightening liquidity via CRR hike etc? (10 Points)