Introduction to the Money Market and the Roles Played by Governments and Security Dealers

Introduction

- All the transactions in the financial markets may appear to be the same: borrowers issue securities that lenders buy.
- However closer examination of these transaction reveal that there are major differences between financial transaction. For example;
  - A corporation borrowing for by issuing 20 years bonds for office building
  - Next week it borrows funds for just 60days to purchase raw material.

Introduction

- The difference in purpose for which money is borrowed can result in the creation of different kinds of financial assets having different maturities, etc.
- The term “money market” is a misnomer. Money (currency) is not actually traded in the money markets.

Introduction

- The securities in the money market are short term with high liquidity, therefore they are close to being money.
- We consider all highly liquid interest-earning investments with a maturity of three months or less at the date of purchase to be cash equivalents. (Microsoft annual report)

Introduction

In theory, the banking industry should handle the needs for short-term loans and accept short-term deposits. Banks also have an information advantage on the credit-worthiness of participants.

Banks do mediate between savers and borrowers; however, they are heavily regulated. This creates a distinct cost advantage for money markets over banks.

Introduction

- Reserve requirements create additional expense for banks that money markets do not have.
- Which causes decrease in interest rate paid to depositors.

The Purpose of Money Markets

- Investors in Money Market: Provides a place for warehousing surplus funds for short periods of time
- Borrowers from money market provide low-cost source of temporary funds

The Purpose of Money Markets

- In simple words the money market arises because for most individuals and institutions, cash inflows and outflows are rarely in perfect harmony with each other, and the holding of idle surplus cash is expensive.

Participants of Market

TABLE 2 ***Money Market Participants***

Participant	Role
U.S. Treasury Department	Sells U.S. Treasury securities to fund the national debt
Federal Reserve System	Buys and sells U.S. Treasury securities as its primary method of controlling the money supply
Commercial banks	Buy U.S. Treasury securities; sell certificates of deposit and make short-term loans; offer individual investors accounts that invest in money market securities
Businesses	Buy and sell various short-term securities as a regular part of their cash management

Participants of Market

- Central Bank (State Bank of Pakistan) Commercial Banks, Co-operative Banks and DFI'Primary Dealers are allowed to borrow and lend.
- Specified Pakistani Financial Institutions, Mutual Funds, and certain specified entities are allowed to access to Call/Notice money market only as lenders.

Participants of Market

- Firms, companies, corporate bodies, trusts and institutions can purchase the treasury bills, Commercial papers and Certificate of Deposits.

Characteristics of the Money Market

- **Funds invested in the money market represent temporary cash surpluses**
  - **Usually surpluses needed in the near future**
  - **Investors are especially sensitive to *risk***
- **Investors seek mainly *safety* and *liquidity***
  - **Ensure surpluses are accessible when needed**
  - **Opportunity to earn *interest income* is secondary**

Types of Risk Confronting Investors

EXHIBIT 10.3 Types of Risk Confronting Investors in the Money and Capital Markets

Type of Risk	Definition
Market risk	The risk to investors whose investment horizon is shorter than the maturity of a financial asset that the market price (value) of that asset will decline, resulting in a capital loss when sold. Sometimes referred to as *interest rate risk*.
Reinvestment risk	The risk to investors whose investment horizon exceeds the maturity of a financial asset that they will be forced to place earnings from that maturing asset into a lower-yielding investment because interest rates have fallen.
Default risk	The probability a borrower will fail to meet one or more promised principal or interest payments on a loan or security.
Inflation risk	The risk that increases in the general price level will reduce the purchasing power of earnings from a loan, security, or other investment.
Currency risk	The risk that adverse movements in the price of one national currency vis-à-vis another will reduce the net rate of return from a foreign investment. Sometimes referred to as *exchange rate risk*.
Political risk	The probability changes in government laws or regulations will reduce an investor's expected return from an investment.

Characteristics of the Money Market

- ***Original maturity*** **is the interval of time between the issue date of a security and its promised redemption date**
  - **It can extend up to one year**
  - **It can be as short as overnight**
- ***Actual maturity*** **is the interval of time between the current date and the promised redemption date of a security**
  - **Thousands of money market instruments outstanding**
  - **Some reach maturity every day**

Characteristics of the Money Market

- **Money market is extremely *broad* and *deep***
  - **It can absorb a large volume of transactions**
  - **Transactions have only small effects on security prices and interest rates**
- **The money market is also very *efficient***
  - **Securities dealers, major banks, and funds brokers maintain constant contact**
    - **Telephone**
    - **Computer network**
  - **Hence alert to any bargains**

Characteristics of the Money Market

- ***Federal funds*** are mainly deposit balances of commercial banks held at regional Federal Reserve banks and at larger correspondent banks across the U.S.
- Federal funds are often called *immediately-available funds* because of the speed with which money moves from one bank's reserve account to that of another.

Characteristics of the Money Market

- ***Clearinghouse funds***
  - Alternate structure to the federal funds
  - The clearinghouse is a location where checks and other cash items are delivered and passed from one financial organization to another
  - Clearinghouse funds are an acceptable means of payment for most purposes
  - Too slow for the money market
  - Clearinghouse funds also have an element of risk

NIFT- National Institutional Facilitation Technologies (Pvt.) Limited

- Incorporated in September 1995 as joint venture between a consortium of six banks and entrepreneurs from the private sector
  - Habib Bank Limited
  - MCB Bank Limited
  - National Bank of Pakistan
  - United Bank Limited
  - Allied Bank Limited
  - First Women Bank Limited

NIFT

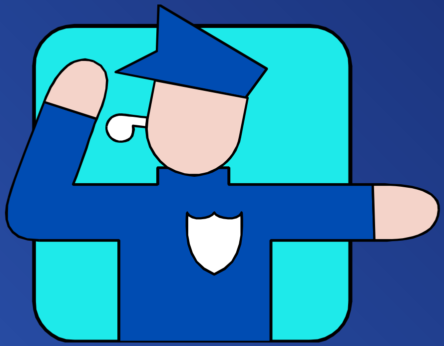
- As of May 2009, 40 commercial banks and their **5571 branches** in **185 major cities**, 20 data centres utilize NIFT’s services.
  - **Cheque Clearing & Settlement Services**
  - **Utility Bill Payment Processing Services**

Characteristics of the Money Market

- The money market is a wholesale market for funds
  - Most trading occurs in multiples of a million dollars
  - Dominated by a relatively small number of large financial institutions Securities also move readily from sellers to buyers through the market-makers
    - Major security dealers
    - Brokers

Characteristics of the Money Market

- Governments and central banks around the world play major roles in the money market as the largest borrowers and as regulators.



Government Involvement in the Money Market

- Governments set the rules of the money-market “game”
  - Through regulation
  - Consistently rank among top issuers of money market debt
- Help to shape money market conditions
  - Working through central banks
  - Set tone for daily borrowing and lending activities

Government Involvement in the Money Market

- Government is usually most visible in the money market when they *borrow money*
- In Pakistan Through Government of Pakistan Market Treasury Bills (MTBs)
  - One of the largest borrowers in the money market
  - Enters the market twice in a month to sell Treasury bills
- Other governments have similar instruments

Treasury Bills

- *Pak **Treasury bills** (T-bills)*
  - Direct obligations of the Pak government
  - Have an original maturity of one year or less
- They carry great weight in the financial system
  - Zero (or nearly zero) default risk
  - Ready marketability
  - High liquidity

Types of Treasury Bills

- *Bills* are issued routinely twice in a month (After every two weeks)
  - In competitive auctions
  - Various original maturities
    - Three month (12 weeks)
    - Six months (24 weeks)
    - Twelve months (One year)

How Bills are Sold

- T-bills sold using an auction
  - Marketplace sets the bill prices and yields
  - New regular bill issues announced by Treasury
    - On Wednesday fortnightly

How T-Bills are traded in Pakistan?

At start

Treasury bills were issued on fixed rate.

eg; six months at 6 percent per year

In April 1991

- Introduced the American-style auction-based system.
- The role of primary market restrict to

State Bank of Pakistan use following two methods to trade T-bills.

OPEN MARKET OPERATION

- In OMO Government fix the discount rate before the announcing the new securities and can be issued when they need funds.
- Through OMO Government can sell as well as buy back securities.
- Trading T-Bills in OMO is mainly to

Auction System

- SBP announces the T-Bill auction
- Primary dealers submit the bids
- After the submission deadline, bids will open
- MOF decides the cut off price.
- After one or two days of finalizing price, securities are issued.

How Bills are Sold

- Accepts two types of offers
  - Competitive tender
    - Submitted by large investors
    - Typically millions of dollars
    - Bid a discount rate of interest (DR)
    - Compete for limited supply
  - Noncompetitive tender
    - Small investors accept price determined by the auction

Market Interest Rates on Pak T-Bills

- Typically low yield
  - Nearly zero default risk
  - Superior marketability
  - Set the tone for other money market instruments
- Prices are relatively stable
  - Yields do fluctuate
    - Changes in economic conditions
    - Changes in government policy
    - Changes in many other factors

Primary Dealers in Government Securities

- *Primary dealers* are dealer firms that are qualified to trade securities directly with the State Bank of Pakistan
  - Agree to "meaningfully participate" in trading with the SBP
  - Agree to trade any time the SBP wishes
  - Agree to make "realistic" bids
  - Agree to trade continuously in the full range of government securities

Primary Dealers in Government Securities

Banks, investment banks, development financial institutions and brokerage houses

1. NIB Bank (Top 3)
2. Habib Bank (Top 3)
3. National Bank (Top 3)
4. JS Bank
5. Standard Chartered Bank Pakistan
6. United Bank
7. Pak Oman Investment Company
8. Faysal Bank
9. MCB Bank
10. Citibank
11. Bank Alfalah. (july2014 to june 2015)

Calculating Return on T-Bills

- You pay \$9850 for a 91-day T-bill. It is worth \$10,000 at maturity. What is its annualized yield?

$$i_{yt} = \frac{F - P}{P} \times \frac{365}{n} \qquad (1)$$

$$i_{yt} = \frac{\$10{,}000 - \$9{,}850}{\$9{,}850} \times \frac{365}{91} = 0.0611 = 6.11\%$$

- F: Face Value
- P:Purchasing Price, n: No of Days to Maturity