Fall 2013
ADVANCED FINANCIAL INSTRUMENTS AND MARKETS

## Lecture No. 01

# Financial Institutions and Role of Government

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## Course Introduction

* Simultaneously Philosophical and Practical underpinnings
* Banking, Insurance, Securities, Derivatives, Financial Crisis.
* International Bias but will try best to relate.
* Course is more theoretical but cannot avoid mathematics/statistics completely.
* Problem Sets/case studies/Quiz etc.

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## Course Objectives

**On successful completion of this module, you are expected to:**

1. Gain some knowledge of the main functions of financial markets and institutions
2. Develop an understanding of the workings of equity capital markets and Instruments of Risk Management
3. Understand the nature of financial instruments and the reasons for innovating such instruments
4. Be aware of the relevant empirical capital markets research
5. Become familiar with the key research methods used in the financial markets literature

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## Teaching Methodology

* Lecture for disseminating key concepts
* Discussion on practical issues
* Assignments and Presentations/Projects
* Quiz/Case Studies



## Evaluation

| | |
|---|---|
| **Individual Class Presentations/Projects**<br>*Regular Class Presentations/Participation (7%)*<br>*Term Paper/Assignment (8%)*<br>*Class Quiz/Case Studies (5%)* | **20%** |
| **Mid Term Test (45 Minutes)** | **20%** |
| **Final Examination (2 hours)** | **60%** |
| | **100%** |



## Recommended Text


1. **Fabozzi, Frank J., Franco Modigliani, Frank J. Jones, and Michael G. Ferri.** *Foundations of Financial Markets and Institutions*, 4th ed. Prentice Hall, 2010.
2. **FS Mishkin, SG Eakins**. Financial Markets and Institutions 5th Edition. Pearson Publications
3. **John C. Hull,** *Options, Futures and Other Derivatives*, 6th Edition, Prentice Hall.
4. **Frank J. Fabozzi**: *Bond Market Analysis and Strategies*, Prentice Hall.
5. **Szymon Borak Wolfgang Karl Härdle Brenda López Cabrera,** *Statistics of Financial Markets*, Springer Heidelberg Dordrecht London New York
6. **Robert Dubil**, *An Arbitrage Guide to Financial Markets*, 2004 , John Wiley & Sons Ltd
7. *Relevant Research Articles (Downloadable from www.financecottage.com)*

## Course Contents (Mid Term)

1. Financial Institutions and Role of Govt.
2. Risk and Financial crisis
3. Technology and Invention in Finance
4. Portfolio Diversification and Supporting Financial Inst.
5. Determinants of Asset Prices and Interest Rates
6. Organization and Structure of Markets
7. Market for Government and Corporate Securities
8. Mortgage and Securitized Asset Markets
9. Market Derivative Securities

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## Course Contents (Final Term)

1. Collateral Present Value and Vocabulary of Finance
2. Mechanics of Future Markets
3. Hedging Strategies using futures
4. Interest rates and Determinants of Forward and Future prices
5. Mechanics of Option Markets
6. Insurance: The archetypical Risk Management Institution
7. Financial Instruments and Major World Financial Crisis

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# Today's Session

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## Session - I

* Why Finance
* Wall Street Crash 1929
* Japanese Asset Price Bubble
* Asian Financial Crisis
* Importance of Financial Markets
* Basic Financial Instruments



## Wall Street Crash of 1929

* The **Wall Street Crash of 1929**, also known as the **Black Tuesday** and the **Stock Market Crash of 1929**, began in late October 1929 and was the most devastating stock market crash in the history of the United States, when taking into consideration the full extent and duration of its fallout. The crash signaled the beginning of the 10-year Great Depression that affected all Western industrialized countries and did not end in the United States until the onset of American mobilization for World War II at the end of 1941. 15 million people had unemployment coming to them after the banks crashed.



## Japanese asset price bubble 1986

* The **Japanese asset price bubble** was an economic bubble in Japan from 1986 to 1991, in which real estate and stock prices were greatly inflated. The bubble's subsequent collapse lasted for more than a decade with stock prices initially bottoming in 2003, although they would descend even further amidst the global crisis in 2008. The Japanese asset price bubble contributed to what some refer to as the Lost Decade. Some economists, such as Paul Krugman, have argued that Japan fell into a liquidity trap during these years.

## Asian Financial Crisis 1997

* The **Asian financial crisis** was a period of financial crisis that gripped much of Asia beginning in July 1997, and raised fears of a worldwide economic meltdown due to financial contagion. The crisis started in Thailand with the financial collapse of the Thai baht after the Thai government was forced to float the baht (due to lack of foreign currency to support its fixed exchange rate), cutting its peg to the U.S. dollar, after exhaustive efforts to support it in the face of a severe financial overextension that was in part real estate driven.





## US Subprime Mortgage

* The U.S. **subprime mortgage crisis** was a set of events and conditions that led to the late-2000s financial crisis, characterized by a rise in subprime mortgage delinquencies and foreclosures, and the resulting decline of securities backed by said mortgages. Several major financial institutions collapsed in September 2008, with significant disruption in the flow of credit to businesses and consumers and the onset of a severe global recession.





## Importance of Financial Markets

Financial markets, such as bond and stock markets, are crucial in our economy.

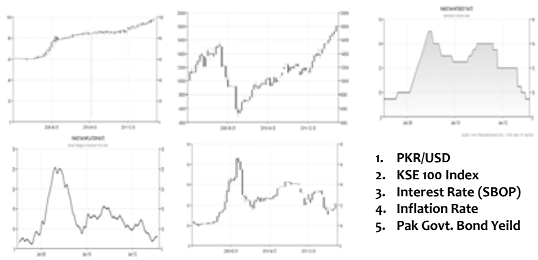
* These markets channel funds from savers to investors, thereby promoting economic efficiency.
* Market activity affects personal wealth, the behavior of business firms, and economy as a whole
* Debt markets, or bond markets, allow governments, corporations, and individuals to borrow to finance activities.

## *Importance of Financial Markets*

- The stock market is the market where common stock (or just stock), representing ownership in a company, are traded.
- Companies initially sell stock (in the primary market) to raise money. But after that, the stock is traded among investors (secondary market).
- The foreign exchange market is where international currencies trade and exchange rates are set.
- Although most people know little about this market, it has a daily volume around $1 trillion!



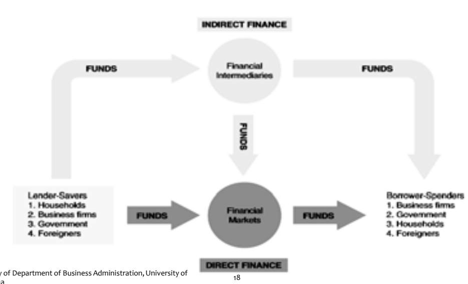
## Pakistan Market Indicators 2007-2013



1. PKR/USD
2. KSE 100 Index
3. Interest Rate (SBOP)
4. Inflation Rate
5. Pak Govt. Bond Yeild



## Design of Financial Markets



## Basic Financial Instruments

* Its your Turn…..



## Session - II

* Introduction
  * Financial Assets
  * Financial Markets
  * Globalization and Financial Markets
  * Derivative Markets
* Role of Financial Intermediaries
* Overview of Asset/Liability Management for FIs
* Role of Government



## Introduction

* Product VS Factor Market
* Financial Market and Financial Assets
* Financial Assets, Financial Instruments, Securities
* Debt VS Equity Instruments
* Pricing Principles of Financial Assets
* Role of Financial Asset
  * Transfer of Funds from Surplus to Deficit units
  * Redistribution of unavoidable risk

## Financial Markets

* Role of Financial Markets
  * Price Discovery Process
  * Offering Liquidity
  * Reduction of Search/Information Cost
* Classification of Financial Markets
  * Primary Vs Secondary (Seasoning of Claim)
  * Money Vs Capital (Maturity)
  * Debt Vs Equity (Nature of Claim)
  * Cash Vs Derivative (Delivery/Settlement of Claim)
  * Organized Vs OTC (Structure)





## Globalization of Financial Markets

* The factors that have led to the integration of Financial Markets
  * Deregulation/Liberalization
  * Technological Advances for monitoring/executing.
  * Increased Institutionalization of Financial Markets





## Financial Institutions

* Functions performed by Financial Institutions
  * Financial Intermediation
  * Exchange of financial assets on behalf of customers
  * Exchange of financial assets on their own account
  * Assisting in creation of financial assets
  * Providing investment advice
  * Management of portfolios

## Financial Intermediaries

* Commercial Banks
* Saving and loan association
* Saving Banks
* Insurance companies
* Pension funds
* *Captive Finance Companies ??*




## Role of Financial Intermediaries

* Direct and Indirect Investments
* Maturity Intermediation
* Risk Diversification
* Cost Reduction
* Payment Mechanism




## Asset Liability Management of Financial Institutions

* Nature of Liabilities
  * The amount and timing of the cash outlays that must be made to satisfy the contractual terms of the obligation issued. (Liquidity Concerns)

| TYPE OF LIABILITY | AMOUNT OF CASH OUTLAY | TIMING OF CASH OUTLAY |
|---|---|---|
| Type – I | Known | Known |
| Type – II | Known | Uncertain |
| Type – III | Uncertain | Known |
| Type – IV | Uncertain | Uncertain |

## Primary Assets and Liabilities of FIs

| Type of Intermediary | Primary Liabilities (Sources of Funds) | Primary Assets (Uses of Funds) |
|---|---|---|
| **Depository institutions (banks)** | | |
| Commercial banks | Deposits | Business and consumer loans, mortgages, U.S. government securities, and municipal bonds |
| Savings and loan associations | Deposits | Mortgages |
| Mutual savings banks | Deposits | Mortgages |
| Credit unions | Deposits | Consumer loans |
| **Contractual savings institutions** | | |
| Life insurance companies | Premiums from policies | Corporate bonds and mortgages |
| Fire and casualty insurance companies | Premiums from policies | Municipal bonds, corporate bonds and stock, U.S. government securities |
| Pension funds, government retirement funds | Employer and employee contributions | Corporate bonds and stock |
| **Investment intermediaries** | | |
| Finance companies | Commercial paper, stocks, bonds | Consumer and business loans |
| Mutual funds | Shares | Stocks, bonds |
| Money market mutual funds | Shares | Money market instruments |



## Role of Government in Financial Markets

* Stop Market Failure?
- Main Reasons for Regulation
  1. Increase Information to Investors
     * Decreases adverse selection and moral hazard problems
     * SEC forces corporations to disclose information
  2. Ensuring the Soundness of Financial Intermediaries
     * Prevents financial panics
     * Chartering, reporting requirements, restrictions on assets and activities, deposit insurance, and anti-competitive measures
  3. Improving Monetary Control
     * Reserve requirements



## Regulation Reason: Ensure Soundness of Financial Intermediaries (cont.)

- To protect the public and the economy from financial panics, the government has implemented six types of regulations:
  — Restrictions on Entry
  — Disclosure
  — Restrictions on Assets and Activities
  — Deposit Insurance
  — Limits on Competition
  — Restrictions on Interest Rates

## Regulation: Restriction on Entry

- Restrictions on Entry
  - Regulators have created very tight regulations as to who is allowed to set up a financial intermediary
  - Individuals or groups that want to establish a financial intermediary, such as a bank or an insurance company, must obtain a charter from the state or the federal government
  - Only if they are upstanding citizens with impeccable credentials and a large amount of initial funds will they be given a charter.

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## Regulation: Disclosure

- Disclosure Requirements
- There are stringent reporting requirements for financial intermediaries
  - Their bookkeeping must follow certain strict principles,
  - Their books are subject to periodic inspection,
  - They must make certain information available to the public.

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## Regulation: Restriction on Assets and Activities

- Restrictions on the activities and assets of intermediaries helps to ensure depositors that their funds are safe and that the bank or other financial intermediary will be able to meet its obligations.
  - Intermediary are restricted from certain risky activities
  - And from holding certain risky assets, or at least from holding a greater quantity of these risky assets than is prudent

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## Regulation: Deposit Insurance

- The government can insure people depositors to a financial intermediary from any financial loss if the financial intermediary should fail



## Regulation: Limits on Competition

- Although the evidence that unbridled competition among financial intermediaries promotes failures that will harm the public is extremely weak, it has not stopped the state and federal governments from imposing many restrictive regulations
- In the past, banks were not allowed to open up branches in other states, and in some states banks were restricted from opening additional locations



## Regulation: Restrictions on Interest Rates

- Competition has also been inhibited by regulations that impose restrictions on interest rates that can be paid on deposits
- These regulations were instituted because of the widespread belief that unrestricted interest-rate competition helped encourage bank failures during the Great Depression
- Later evidence does not seem to support this view, and restrictions on interest rates have been abolished

## Regulation Reason: Improve Monetary Control

- Because banks play a very important role in determining the supply of money (which in turn affects many aspects of the economy), much regulation of these financial intermediaries is intended to improve control over the money supply
- One such regulation is **reserve requirements,** which make it obligatory for all depository institutions to keep a certain fraction of their deposits in accounts with the Federal Reserve System (the Fed), the central bank in the United States
- Reserve requirements help the Fed exercise more precise control over the money supply



## Thank You!