2.13 Option: Financial Institutions and Regulation
1 Course Unit
Year 4
Lecturer: Hugh Goodacre.

Aims (Broad Educational Purpose)
- This module introduces the theory of financial market failure and regulation. It integrates modern theories of asymmetrical information into the analysis of financial institutions, relating the theory to current developments.

Objectives (Specific Learning Outcomes)
The module provides the basis for:
- Informed debate on the reasons for financial market failure and the rationale for financial regulation, with reference to topical issues.
- An understanding of the structure of the markets for fund management, insurance, capital, and banking services, with particular reference to their information structure and the tasks faced by the regulator in each case.
- An understanding of how financial institutions interact with, and affect, the wider economy.
- An understanding of the main differences between the various financial systems existing in the world today.
- An informed assessment of the current regulatory regime in the UK, with particular reference to the experience of the Financial Services legislation enacted under the present Labour government.
- An appreciation of current issues under discussion in the press, particularly those most relevant to the coursework project.

On completion of the module, the student will have gained a familiarity with the theoretical concepts encountered in the current technical literature on financial issues.
- The concept of asymmetrical information will be illustrated in connection with current issues of intermediation and problems of agency.
- These theoretical aspects of the module draw mainly on the textbook:
  
  Oxford University Press.
Teaching

- The weekly programme consists of a one-hour lecture followed by a one-and-a-half hour class.

- The classes focus on a number of formal models, each of which is based on a seminal article in the financial literature. The models will be presented by means of worksheets based on the simplified versions given in the above textbook, but it is recommended that an attempt is also made to read the original articles on which they are based.

Assessment

- **Coursework (20%)**: “Assess the experience of the current framework for financial regulation in the UK”. To be handed in by 19 January 2009.

- **Exam (80%)**: Three-hour formal examination in June.

Lecture topics

Financial system in crisis: the background.

Financial institutions: the market for fund management as an example.

Financial regulation.

The market for insurance and its regulation.

Capital market microstructure.

Insider trading.

Shareholders, management and conflict of interest.

Intermediation theory.

Excessive risk-taking.

Liquidity requirements and systemic risk.

Banking regulation in Britain today.
Brief lecture outlines and required reading

Note: These outlines are provisional.

Reading:

S = Spencer 2000 *The structure and regulation of financial markets.*

*All* the references to this book are *required reading.*

For further background reading, see any general introduction to financial markets, e.g.

Mishkin, Frederic S. *The economics of money, banking, and financial markets.*

Financial system in crisis: the background.

The core principles of bank management. Deregulation: historical phases in UK and US; from asset management to liability management; banks and nbfs.


Required reading:


Financial institutions: the market for fund management as an example.


S1.6-10, S2.1-2.

Financial regulation.

Solutions to market failure (i) from within the market (ii) by collective action by an industry (iii) by government intervention and regulation. The historical experience of financial regulation.

S1.1-5, S2.6-12.

The market for insurance and its regulation.

Mutual insurance; idiosyncratic and common risk; insurance and asymmetrical information; group insurance and risk-pooling. The under-insurance problem; limitations of compulsion as a solution.

S3.1, S3.8-10.
Brief lecture outlines and required reading, *contd*

**Capital market microstructure.**

S4.1-5.

**Insider trading.**
Insider information: static model with fixed information endowments; dynamic model with learning effects. Endogenous information: research costs and price-inefficiency. Equity price and true value: management incentives; ‘takeover discipline’.

S5.4-7, S6.3-9, S7.1-3, 9-11.

**Intermediation theory.**

S8.1-3, S8.6.

**Excessive risk-taking.**

S9.2-6.

**Liquidity requirements and systemic risk.**
Uncertain liquidity requirements and bank runs. Solutions: suspension of convertibility; deposit insurance; lender of last resort facility. Systemic risk.

S10.5-10.

**Financial regulation in Britain today.**
Banking regulation; current Financial Services legislation; coursework project.

S11 and S12.
Programme of classes.

**Worksheets:** The classes are based on a series of Worksheets which run through the simplified versions given in S of some standard models of financial institutions and regulation.

**Reading:** *All* the references to S are *required reading.*

**W1. Disappearing markets.**


S2.3-5.

**W2. Insider trading.**

Insider information, with fixed information endowments. Dealer’s profits. Analysing spread: insider information, spread and markets. (After Copeland and Galai 1983.)

S4.6.

**W3. Convexity.**

Convexity (concavity) of payoff to equity-holders (fixed-interest debt-holders).

S9.1.

**W4. Uncertain liquidity demand and bank runs.**


S10.1-4.
Reading.

Required reading:


The basic textbook for the classes; also includes much required reading on general lecture topics.

Useful background reading:


Well-established textbook; strong emphasis on US, but much useful general background.

e.g. Chapter 11, etc., on regulation and banking crises. See also chapter 10 on competition issues, chapter 8 on financial structure and asymmetrical information (shorter version in chapter 2: 37-41).


Well-established textbook; much detail on money markets, and nbfs; individual chapters on banking in different European countries.

Useful background: Chapter 1: “The role of a financial system”.


The following are more technical:


Pursues the theme that the primary motive for regulation is the representation of small depositors.

Very handy for reference on technical terms and jargon:


The articles on which the Worksheets are based are:


Relevant web material:

**FSA** website:

- General mission statements:  
  [http://www.fsa.gov.uk/Pages/about/index.shtml](http://www.fsa.gov.uk/Pages/about/index.shtml)

**BoE** website:

- See relevant pages, e.g.  
  [http://www.bankofengland.co.uk/publications/speeches/financialstability.htm](http://www.bankofengland.co.uk/publications/speeches/financialstability.htm)
Coursework project.

To be completed during the Christmas vacation. Maximum length 2000 words.

**Theme / suggested title:**

“The experience of the current framework for financial regulation in the UK”.

BUT: You can modify this title if you choose (see below).

Scan through the whole of S for relevant discussion:

- Take note of particularly relevant sections we have covered, e.g. 2.8-12; 3.8-10; 4.1; 5.4-6; 6.9; 7.11; 9.5-6; 9.11, and scan through all of chapters 11 and 12.

Rather than attempting an overall survey of the question, you may choose a particular topic, in which case, you may adapt the title accordingly.

- An overall survey is OK, but if you have particular experience or knowledge, you will probably greatly benefit by making use of this and adopting a specialised focus.
- You might also consider a particularly topical subject of direct relevance to the theme, such an assessment of the performance of the ‘tripartite’ regulation system during the period of financial turbulence in recent months.
- **Note:** The purpose of the exercise is not just to provide a general discussion of your chosen topic, but to apply to it (or explicitly contest) the theory and methodology taught in this module, e.g. market disappearance, informational asymmetries, etc.

During the first half of the term, draw up a list of relevant literature, documentation or regulations that you will be considering in your essay. (On web material, see below.)

By the end of the reading week, write a brief abstract of your essay, between 150 and 300 words long.

- The abstract should clearly and explicitly explain how your discussion will relate your chosen topic to the methodology and theory taught in this module.

Have this summary ready for presentation after reading week so that we can all discuss it in class and benefit from each other’s special knowledge and interests.

- Never mind if the abstract is tentative; you can always change it as the work gets under way.

**WARNING: e-plagiarism:**

In the case of use of material from the web, make absolutely sure that you give a full reference, e.g. don’t just say “FSA website” or put in a URL, but say exactly where on the site. Refer to web material in the same way as you would to book or periodical literature.

**FAILURE TO DO THIS WILL RESULT IN DISQUALIFICATION:** see the University’s regulations on e-plagiarism.
Answer BOTH the questions in SECTION A and any TWO of the questions in SECTION B.

Section A accounts for 40% of the total exam mark. Section B accounts for 60% of the total exam mark.

Section A: (Answer BOTH the questions in this section)
This Section accounts for 40% of the total exam mark.

A1. Take the following model of the market for fund management:

- The ability of fund managers to beat the performance of the market is at best 3% p.a.
- At worst the funds they manage just perform in line with the market.
- We consequently define the ‘quality’ of managers as \( x \), where \( 0 \leq x \leq 3 \).
- The capacity of the various individual managers is uniformly distributed between these two extremes.
- Managers’ costs (\( c \)) are perfectly correlated with their management quality (\( x \)).
- Managers’ efficiency parameter (\( a \)) is defined as \( x/c \).
- Management quality is exogenous – the quality of an individual manager does not change.
- In a seller’s market, managers receive a 50% mark-up on costs.
- Managers can correctly assess their own individual ability, but their clients can only observe the average performance of the fund management industry as a whole.
- The reservation prices of fund managers and their clients are defined as \( p^s \) and \( p^d \) respectively.
- The marginal manager is defined as the best-performing manager in the market at any given moment, and has a reservation price of \( p^s_{\text{max}} \) and costs of \( c_{\text{max}} \).

(i) Plot, in \((c_{\text{max}}, p)\) space, the reservation price functions of fund managers and their clients, explaining algebraically the steps through which you derive these functions. What is the outcome for the market for fund management in the absence of regulation?

(ii) The fund managers now establish a self-regulatory body which succeeds in excluding all managers who fail to beat the market by at least 1.5%. Briefly describe, with the aid of the above graphical exposition, the outcome.

25 marks

A2. What is meant by the ‘convexity’ of the payoff to holders of equity, and how does this concept serve to explain systemic bias towards excessive risk-taking in the financial sector?

15 marks
Section B: (Answer any TWO of the six questions in this section).
This Section accounts for 60% of the total exam mark.
Each answer carries equal weight, i.e. 30% of the total exam mark.

B1. In a 3-period model, there are N individuals, each of whom has a primary investment of 1 in period 0.

- The primary investment yields 1 if liquidated and consumed in period 1, or \( R > 1 \) if liquidated and consumed in period 2.
- Half the individuals are Type 1s, who ‘die’ in period 1, having first liquidated their investment and consumed its entire value.
- The other half are Type 2s, who survive period 1 but ‘die’ in period 2, having by that time liquidated their investment and consumed its entire value.
- Individuals do not find out which type they are until period 1, and this information is private, i.e. they have no way of knowing each others’ type.
- Consumption in periods 1 and 2 is defined as \( C_1 \) and \( C_2 \) respectively.
- ‘Autarchy’ is defined as a situation in which there is no trading in risk.
- ‘Intermediation’ is defined as a situation in which an intermediary offers a deposit contract which provides insurance against the risk of early death, i.e. the loss of \( (R - 1) \).
- The mechanism is that each depositor contracts to make a payment (\( \pi \)) to the intermediary if he/she turns out to be a Type 2, and the intermediary contracts to make a corresponding transfer payment to each of those who turn out to be a Type 1.
- The transfer payment is set at a socially optimal level (\( \pi^* \)), the corresponding consumption in periods 1 and 2 being \( C_1^* \) and \( C_2^* \) respectively.

Compare the individual’s expected utility in each of the following situations:
- ‘autarchy’;
- intermediation without a bank run;
- intermediation with a bank run and with no deposit insurance;
- intermediation with a bank run in a situation where a government-backed deposit insurance scheme is in place.

Rank the outcomes in each of these situations in order of total social welfare, explaining your reasoning in each case.

B2. In what ways may the concept of asymmetrical information be applied in assessing the record of Britain’s current ‘tripartite’ financial regulatory regime?
B3. What are the fundamental problems involved in the regulation of insider trading in capital markets? In your answer, discuss the relevance of the analysis of ‘spread’ between bid and ask prices, and briefly outline the issues that arise if a company’s share price is affected by its fundamental value.

B4. What regulatory problems arise as a result of asymmetrical information between the contracting parties in contracts that are entered into in financial markets? In your answer, choose ONE of the TWO following options:

- EITHER discuss the issue by way of a comparative discussion of the various different forms of contract in different sections of the financial sector.
- OR provide a more detailed discussion of one particular financial market, e.g. the market for insurance services, the market for mortgages, etc.

B5. What measures may be taken from within financial markets for self-regulation and monitoring of risky behaviour? What are the limitations of such measures?
Abbreviations.

AD Aggregate demand
AEH Adaptive expectations hypothesis
AS Aggregate supply
BB Banks
BoE Bank of England
BOP Balance of payments
BOT Balance of trade
BW Bretton Woods
C Consumption expenditure
CA Comparative Advantage
CB Central Bank
CC Competition and Credit Control
CF Circular flow
CM Classical model
DL Discount loan
DM Deutschmark
DMP Demand management policy
EE Equation of exchange
emecs emerging economies
ER Exchange rates
ER Exchange rates, Excess reserves
ERM [European] Exchange Rate Mechanism.
FE Foreign Exchange
FF Firms
FP Fiscal policy
G Government expenditure
GDP Gross Domestic Product
HH Households
I Investment expenditure
i.t.o. in terms of
ICT Information and Communication Technology
IFIs International Financial Institutions
IMF International Monetary Fund
IS Investment [and other injections] = Savings [and other withdrawals]
J Injections (in CF)
KM Keynesian model
LD Labour demand
LF Loanable funds
LH Left hand
LM Liquidity [demand] = Money [supply]
LR Long run
LS Labour supply
M Money OR Imports
MB Monetary base
MD Money demand
MP Monetary policy
MPC Monetary Policy Committee (of BoE)
MS Money supply
MTFS Medium Term Financial Strategy
NBP Non-bank public
NCM New Classical Macroeconomics
NIAs National Income Accounts
NK New Keynesian macroeconomics
NR Natural rate
NX Net exports (= X - M)
OECD Organisation of Economic Cooperation and Development
omks Older market economies
P Price level
P&I Prices and incomes policy
PC Phillips curve
PIP Policy ineffectiveness postulate
PPP Purchasing power parity
PSBR Public Sector Borrowing Requirement
PSNCR Public Sector Net Cash Requirement
PWC Post-Washington Consensus
PX Price of exports
QTM Quantity theory of money
R Reserves of the commercial banking system
R&D Research and development
RBC Real business cycle
REH Rational expectations hypothesis
RER Real exchange rate
RF Foreign exchange reserves
RRR Required reserve ratio
S Savings
SDM Simple deposit multiplier
SR Short run
T Taxation
TCA Theory of Comparative Advantage
UB Unemployment benefit
UIP Uncovered interest parity
V Velocity of circulation
W Withdrawals (in CF)
WB World Bank
X Exports
Y GDP
YFE Full-employment level of Y
π Inflation