Banking and Capital Markets
Banking and Capital Markets
Course Introduction and Overview

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1 Course Introduction and Objectives

Banking and financial markets have gained renewed prominence both internationally and within each economy. Although most academic economists and policy makers gave them little attention between the 1930s and the 1980s, their importance is now well established. It is a double-sided importance, for banking and financial markets can be a strong foundation for economic growth but they can also be an obstacle, and banking and financial crises can precipitate slowdowns or reversals of growth. Moreover, the character and roles of banking and financial markets continually change, posing new challenges for understanding how they affect the economy. The drive to understand these phenomena has generated a large body of scientific work, leading to new theories and empirical studies of key aspects of banking and financial markets.

This course enables you to understand key aspects of banking and financial markets. You are probably familiar already with major events when banking and financial markets have been in the headlines. Consider the 1980s crash of the savings and loan institutions (‘thrifts’) in the US; the 1987 crash of prices on the New York Stock Exchange and stock markets around the world; the 1997 East Asian Crisis in which crashes on foreign exchange markets and capital markets, and bank credit crunches were central; the 1991 Argentine crisis which effectively closed its banking system; and the 2007–08 financial crisis in which various financial companies went bankrupt, and governments stepped in to provide support to the banking system in a number of countries. You might also be aware of the positive role that strong banking systems and financial markets have played in sustaining the modern economic growth of countries as diverse as the UK and South Africa.

The course takes for granted your familiarity with the outlines of such real world phenomena, and if you wish you will find it easy to refresh your knowledge of them by using the internet. In the course we enable you to step back and think about the underlying principles and characteristics of banking and financial markets that are the foundation for understanding both their normal role in economies and the headline events.

In other words, the course concentrates on the theoretical and empirical scientific knowledge produced by modern research on banking. Since such knowledge is never fully established or ‘proven’, we enable you to examine opposing points of view and to discuss the published studies.

Although the course does not aim to teach applied business skills that can be used directly for decision-making in the financial sector – it is not a ‘how to do it’ course – practical examples will be provided to illustrate developments in the banking sector. After completing the course, you should have gained an understanding of the functioning of the financial sector as a whole, and be familiar with some of the most important theoreti-
cal and historical developments. This should enable you to be more effective in your own research on financial institutions, and provide you with a better understanding of them, which is likely to help you make the right decisions in the workplace as well.

2 The Central Themes of the Course

There are three overreaching themes running through the course units, and a good understanding of these will make it easier for you to follow the plot as you study them. The first theme concerns the question of what financial intermediaries and financial markets are. The second theme deals with the issue of how their soundness can be maintained; it concerns the fragility of the financial system. While the first two themes concern our subject matter, the third one is methodological: we emphasise the use of theoretical concepts such as asymmetric information, moral hazard and transaction cost to illustrate the use of formal models.

Theme 1: The adequate description of the financial system

The first theme is concerned with the general functions of a financial system and the institutions that have emerged in it and ensure its functioning. One of the most basic questions arising here is the question of why financial intermediaries in general, and banks in particular, exist. Banks are so familiar and ubiquitous that in our everyday life we seldom ask why they exist. It appears to be a simple question that must have a simple answer, but such simple questions often prove to be more difficult than they appear.

Try it yourself. We suggest that you pause for a minute and try to answer the question ‘why do banks exist?’

You might say it is because they operate the payments system, enabling us to receive and make payments easily. And that is, indeed, a major service that enables them to exist profitably. But why do they exist as suppliers of finance, making loans and supplying finance by investing in other ways?

As you proceed through the course, you will be able to compare your answer with the answers developed in theoretical models.

Another aspect of this theme concerns the distinction between markets and banks in their roles of risk sharing, disseminating information and funding industries.

In a more historical perspective, this theme also touches upon the wide range of different financial systems that exist in the world. These can be classified into bank-based and market-based financial systems, and some recent contributions to the financial literature have argued that this distinction has far-reaching implications for the way economies and societies develop.
**Theme 2: Financial Crises and the Fragility of the Financial System**

Although banks and other financial institutions are eager to convey an impression of solidity, failures of individual intermediaries and even crises that affect the entire financial system are not uncommon.

One manifestation of this is the failure of credit markets to work in an ideal manner, which results in credit rationing and over-lending: there are good theoretical reasons to assume that banks will tend to lend either too much or too little, with destabilising effects for the banks and for the economy as a whole.

We will give theoretical explanations and historical examples for the vulnerability of banks, which can lead to instability, bank runs on individual banks and general financial crises. We will also deal with the regulatory apparatus by which the state tries to control developments in the financial sector and to prevent the occurrence of financial crises.

**Theme 3: Theoretical Concepts and Formal Models**

The third theme concerns a number of theoretical concepts which have their origin in the more general economic literature, and often in game theory in particular. However, they have today become the building blocks used by economists to analyse financial institutions and financial markets.

One central concept to be mentioned here is that of *asymmetric information*. This refers to the fact that in many situations, people behave differently from the way they would if all participants knew everything there is to know about the situation, and the outcomes that they achieve are correspondingly less desirable than if everybody knew everything.

Asymmetric information is believed to be prevalent in many of the transactions and contracts that banks and other financial institutions deal with. For example, a firm wishing to borrow from a bank to finance a new project might have more information about the project’s prospects and its riskiness than the bank could have. It is the firm’s business, after all. If such asymmetry is particularly large and there are no mechanisms for overcoming it or compensating the bank adequately for it, lending will not occur. If the problem is widespread, as it is believed to be in many countries, financial systems will not grow and firms’ investment will be stunted. Much of our modern understanding of finance is based on the recognition that there are incentives to construct regulations and private financial and corporate governance arrangements that minimise the problems arising from asymmetric information. Well-developed financial systems have grown because they incorporate such mechanisms.

A second concept is *moral hazard*. This is the principle that people who are allowed to escape the consequences of the risks they take are more likely to behave recklessly in the future. For example, a driver who has taken out theft insurance on his car may no longer care so much about having it stolen, and be less careful about locking the door. Similarly, in a society where taxes are
used to pay for health care, people may drink and smoke more without worrying about who is going to pay their medical bills. Moral hazard arises in finance when transactions occur between two parties with asymmetric information, when, for example, a bank makes a loan to a corporation without knowing the riskiness of the uses to which the firm will put the loan and without exacting penalties if the firm uses the loan to behave differently from expected.

While moral hazard generally occurs after someone has made a commitment, adverse selection is a problem beforehand. This is the classical problem faced in markets where the quality of the merchandise is not easily known: when buying a used car, for example, buyers are eager to get a good car for as little money as possible. However, this becomes problematic because the lower the price, the higher the proportion of bad cars, so-called ‘lemons’, that are in the market. Although the seminal theoretical model of adverse selection was applied to the used car market, the general concept had informed insurance company operations for some time, and it is now recognised as being important in banking and other areas of finance.

You might be interested to know that the used car ‘lemon’ problem was analysed by Professor George Akerlof in a paper that was published in 1970:


It had been rejected several times by major journals on the grounds that the problem it considers is trivial. But once it was published it was quickly recognised as a seminal analysis with wide applications in many fields and especially in studying banking and finance where asymmetric information can give rise to adverse selection. In 2001 George Akerlof was awarded the Nobel Prize for Economic Sciences in recognition of the fundamental importance his analysis of the ‘market for lemons’ has for understanding finance and other areas of the economy.

Such closely argued concepts as asymmetric information, moral hazard, or adverse selection and the concept of transaction cost, which we introduce later, may be more or less intuitive when you first think about them, but in general, they can be verified by every-day experience. However, in financial studies, they are usually used as motivating building blocks in the construction of abstract models of transactions. This modelling may take some getting used to: the richness of the phenomenon is reduced to a very small number of prominent features, which allows us to be very exact about the effect that individual factors will have.

It is because of this possible exactitude, and because the use of models is common in the financial studies literature, that formal models have a prominent position in this course. In a number of cases, the model presented in the text of the course units is slightly less complex than the original, which should help you to feel more comfortable with it. We do not expect you to
start generating models of your own as you go along. But we would like you to take the opportunity to explore their formal features, play around with them, and try to consult the original papers whenever possible.

3 The Learning Outcomes

The intended learning outcomes of this course emerge naturally from the three themes we discussed above. When you have completed your study of this course, you will be able to

- demonstrate a well-founded understanding of what financial markets and financial intermediaries are and how they work
- explain the factors that contribute to financial instability, the causes and effects of financial crises, and the strategies that can be used to reduce the risk of their occurrence
- outline and discuss some of the most central concepts and techniques used in the analysis of financial institutions, and
- apply and refine these methods in your own analyses of phenomena which you encounter in financial markets.

4 The Course Authors

**Bassam Fattouh** graduated in Economics from the American University of Beirut in 1995. Following this, he obtained his Masters degree and PhD from the School of Oriental and African Studies, University of London, in 1999. He is a Professor in Finance and Management and Academic Director for the MSc in International Management for the Middle East and North Africa at the Department for Financial and Management Studies, SOAS. He is also currently Senior Research Fellow and Director of the Oil and Middle East Programme at the Oxford Institute for Energy Studies at the University of Oxford. He has published in leading economic journals, including the *Journal of Development Economics, Economics Letters, Economic Inquiry, Macroeconomic Dynamics* and *Empirical Economics*. His research interests are mainly in the areas of finance and growth, capital structure and applied non-linear econometric modelling, as well as oil pricing systems.

**Luca Deidda** completed his doctoral studies in 1999, while he was a lecturer in the Department of Economics at Queen Mary and Westfield College, University of London. He joined the Centre for Financial and Management Studies at SOAS in that same year, as lecturer in financial studies. His research focuses on financial and economic development, markets under asymmetric information and welfare effects of financial development. He is currently working at the Università di Sassari, Sardinia.

**Norman Williams** is a Senior Lecturer in the University of Greenwich, where he teaches in the areas of bank management, international capital markets, the economic context of banking, managerial finance, and finance. His research is in pensions, investment management, banking, capital and
financial markets, and property markets. Before joining Greenwich University he worked in HM Treasury, the Bank of England, and Barclays Capital. Mr Williams wrote Unit 8 on shadow banking.

5 The Course Structure

Unit 1 Bank-Based vs Market-Based Financial Systems
   1.1 Introduction
   1.2 Financial Intermediaries, Financial Markets and Flow of Funds
   1.3 The Financial System
   1.4 Comparing Financial Systems
   1.5 Conclusion

Unit 2 Why do Banks Exist?
   2.1 Introduction
   2.2 Market-Based vs Intermediary-Based Mechanisms
   2.3 The Principles of Financial Intermediation
   2.4 Transaction Costs
   2.5 Banks as Liquidity Insurers
   2.6 Conclusion

Unit 3 Why Banks Exist: Explanations Based on their Lending
   3.1 Introduction
   3.2 Delegated Monitoring
   3.3 Information Sharing Coalitions (Leland and Pyle, 1977)
   3.4 Conclusions

Unit 4 Banks vs Capital Markets
   4.1 Introduction
   4.2 Dimensions of Comparison
   4.3 A Unified Model for Comparison
   4.4 Conclusion

Unit 5 Credit Rationing and Overlending
   5.1 Introduction
   5.2 The Failure of Equilibrium Mechanisms and Financial Repression
   5.3 The Stiglitz and Weiss Model and the Assumption of Asymmetric Information
   5.4 Credit Rationing or Over-Lending?
   5.5 Conclusion

Unit 6 Bank Runs and Regulatory Responses
   6.1 Introduction
   6.2 A Model of Bank Runs
   6.3 Contagion and Systemic Risk
   6.4 Regulatory Responses
   6.5 Conclusion
Unit 7  Financial Crisis
  7.1 Introduction
  7.2 Self-Fulfilling Financial Crises
  7.3 Risk Shifting, Bubbles and Crises
  7.4 Guarantees, Moral Hazard and Banking Crisis
  7.5 Conclusion

Unit 8  Shadow Banking
  8.1 Introduction
  8.2 Defining Shadow Banking
  8.3 The Development of Shadow Banking and the 2007–08 Crisis
  8.4 Shadow Banking and Regulation
  8.5 Conclusion

6  Study Materials

The course has four main components:

- Course Text
- Textbook
- Course Reader
- Assignments.

The Course Text

The course text consists of eight units, and their contents can be summarised as follows:

- Broadly, Unit 1 deals with financial institutions, financial markets and bank-based and market-based financial systems.
- Units 2 and 3 focus on the issue of why banks exist.
- Unit 4 focuses on the different roles of banks and capital markets.
- Units 5, 6, and 7 deal with market failures, including credit rationing and over-lending, banking instability and regulation and financial crisis.
- Finally, Unit 8 considers the activities and entities which form the shadow banking system, how this system differs from the traditional banking system, and the risks present in the shadow banking system.

The Textbook

There is no text of an appropriate standard covering the whole course, but one textbook is closely related to the content of this course in many of its sections.

Comparing Financial Systems by Franklin Allen and Douglas Gale, published in 2000 by the MIT Press, arranges a series of papers by these eminent scholars in the field of banking and finance that were written in the course of two decades. Nevertheless, they have been combined here to form a coherent
whole. Some of the chapters dealt with in their book will be presented in the
text, and you will be asked to read them as you go along. In some cases, the
mathematical apparatus used in their text is more complex than its presenta-
tion in the course text, and its appreciation may require some effort.
However, we encourage you to attempt to read the whole book after studying
these units. While challenging, this should provide you with a better under-
standing of the course and a wider basis to build your own research on.
The textbook presents the topics in a different order from that followed by
the units. For this reason, you will sometimes find that the textbook readings
you are given come from different sections of the book. By the end of the
course, you will have met most of the concepts and models necessary to
analyse the roles of banking and financial markets and their problems, and to
engage with the related academic literature.

**Articles and Selected Readings**

In most units, we also provide readings of articles and other material. These
are different from a textbook, which is more oriented to giving an *overview*
of different authors’ points of view. When you study a reading, you should be
prepared to consider the author’s point of view so that if you disagree with it
you can express your reasons for this disagreement; and if you agree with it,
you can equally explain why. In other words, you should *critically evaluate*
the readings. The other function which many of the readings have is that they
include more empirical material and case studies, which complements the
study of theoretical principles in the units and the books.

**Assignments**

The assignments for the course have been designed to enable you to develop
your understanding of the course content and to develop your critical evalua-
tion of readings.

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**7 Study Advice**

This course was written with the aim of providing an introduction to research
in financial studies, as well as to the phenomena themselves.

The materials that you study in this course may at times involve dry for-
malism, although we do think that they are all central to an understanding of
the financial sector. The readings, and particularly the articles, will provide
examples and illustrations, but the main effort to bring the material to life
still lies with you: the more you manage to link it with what you read in the
papers, what you hear in your workplace, and what you come across in other
readings and your own experience, the more you are likely to profit from the
exercise of studying this course.

We would like you to experiment and look at the materials with an open
mind. Some of the materials we provide may appear paradoxical, and espe-
cially with the selected readings, you may have strong views that differ from
those of the authors concerned. We encourage you to formulate your own positions clearly in your coursework, and not to feel bound to reconcile all of the conflicting approaches we present.

Ideally, this course should encourage you to do research on the financial sector on your own, and the best time to start trying may be right now.

8 Assessment

Your performance on each course is assessed through two written assignments and one examination. The assignments are written after week four and eight of the course session and the examination is written at a local examination centre in October.

The assignment questions contain fairly detailed guidance about what is required. All assignment answers are limited to 2,500 words and are marked using marking guidelines. When you receive your grade it is accompanied by comments on your paper, including advice about how you might improve, and any clarifications about matters you may not have understood. These comments are designed to help you master the subject and to improve your skills as you progress through your programme.

The written examinations are ‘unseen’ (you will only see the paper in the exam centre) and written by hand, over a three hour period. We advise that you practise writing exams in these conditions as part of your examination preparation, as it is not something you would normally do.

You are not allowed to take in books or notes to the exam room. This means that you need to revise thoroughly in preparation for each exam. This is especially important if you have completed the course in the early part of the year, or in a previous year.

Preparing for Assignments and Exams

There is good advice on preparing for assignments and exams and writing them in Sections 8.2 and 8.3 of Studying at a Distance by Talbot. We recommend that you follow this advice.

The examinations you will sit are designed to evaluate your knowledge and skills in the subjects you have studied: they are not designed to trick you. If you have studied the course thoroughly, you will pass the exam.

Understanding assessment questions

Examination and assignment questions are set to test different knowledge and skills. Sometimes a question will contain more than one part, each part testing a different aspect of your skills and knowledge. You need to spot the key words to know what is being asked of you. Here we categorise the types of things that are asked for in assignments and exams, and the words used. All the examples are from CeFiMS examination papers and assignment questions.
Definitions
Some questions mainly require you to show that you have learned some concepts, by setting out their precise meaning. Such questions are likely to be preliminary and be supplemented by more analytical questions. Generally ‘Pass marks’ are awarded if the answer only contains definitions. They will contain words such as:

- Describe
- Define
- Examine
- Distinguish between
- Compare
- Contrast
- Write notes on
- Outline
- What is meant by
- List

Reasoning
Other questions are designed to test your reasoning, by explaining cause and effect. Convincing explanations generally carry additional marks to basic definitions. They will include words such as:

- Interpret
- Explain
- What conditions influence
- What are the consequences of
- What are the implications of

Judgment
Others ask you to make a judgment, perhaps of a policy or of a course of action. They will include words like:

- Evaluate
- Critically examine
- Assess
- Do you agree that
- To what extent does

Calculation
Sometimes, you are asked to make a calculation, using a specified technique, where the question begins:

- Use indifference curve analysis to
- Using any economic model you know
- Calculate the standard deviation
- Test whether

It is most likely that questions that ask you to make a calculation will also ask for an application of the result, or an interpretation.

Advice
Other questions ask you to provide advice in a particular situation. This applies to law questions and to policy papers where advice is asked in relation to a policy problem. Your
advice should be based on relevant law, principles, evidence of what actions are likely to be effective.

- Advise
- Provide advice on
- Explain how you would advise

Critique
In many cases the question will include the word ‘critically’. This means that you are expected to look at the question from at least two points of view, offering a critique of each view and your judgment. You are expected to be critical of what you have read.

The questions may begin
- Critically analyse
- Critically consider
- Critically assess
- Critically discuss the argument that

Examine by argument
Questions that begin with ‘discuss’ are similar – they ask you to examine by argument, to debate and give reasons for and against a variety of options, for example

- Discuss the advantages and disadvantages of
- Discuss this statement
- Discuss the view that
- Discuss the arguments and debates concerning

The grading scheme
Details of the general definitions of what is expected in order to obtain a particular grade are shown below. Remember: examiners will take account of the fact that examination conditions are less conducive to polished work than the conditions in which you write your assignments. These criteria are used in grading all assignments and examinations. Note that as the criteria of each grade rises, it accumulates the elements of the grade below. Assignments awarded better marks will therefore have become comprehensive in both their depth of core skills and advanced skills.

70% and above: Distinction As for the (60-69%) below plus:
- shows clear evidence of wide and relevant reading and an engagement with the conceptual issues
- develops a sophisticated and intelligent argument
- shows a rigorous use and a sophisticated understanding of relevant source materials, balancing appropriately between factual detail and key theoretical issues. Materials are evaluated directly and their assumptions and arguments challenged and/or appraised
- shows original thinking and a willingness to take risks

60-69%: Merit As for the (50-59%) below plus:
- shows strong evidence of critical insight and critical thinking
• shows a detailed understanding of the major factual and/or theoretical issues and directly engages with the relevant literature on the topic
• develops a focussed and clear argument and articulates clearly and convincingly a sustained train of logical thought
• shows clear evidence of planning and appropriate choice of sources and methodology

50-59%: Pass below Merit (50% = pass mark)
• shows a reasonable understanding of the major factual and/or theoretical issues involved
• shows evidence of planning and selection from appropriate sources,
• demonstrates some knowledge of the literature
• the text shows, in places, examples of a clear train of thought or argument
• the text is introduced and concludes appropriately

45-49%: Marginal Failure
• shows some awareness and understanding of the factual or theoretical issues, but with little development
• misunderstandings are evident
• shows some evidence of planning, although irrelevant/unrelated material or arguments are included

0-44%: Clear Failure
• fails to answer the question or to develop an argument that relates to the question set
• does not engage with the relevant literature or demonstrate a knowledge of the key issues
• contains clear conceptual or factual errors or misunderstandings

[approved by Faculty Learning and Teaching Committee November 2006]

Specimen exam papers

Your final examination will be very similar to the Specimen Exam Paper that you received in your course materials. It will have the same structure and style and the range of question will be comparable.

For students enrolled on FFL107, the examination paper will differ from the specimen examination here in that you will have two hours to answer two questions from a choice of six.

CeFiMS does not provide past papers or model answers to papers. Our courses are continuously updated and past papers will not be a reliable guide to current and future examinations. The specimen exam paper is designed to be relevant to reflect the exam that will be set on the current edition of the course.
Further information

The OSC will have documentation and information on each year’s examination registration and administration process. If you still have questions, both academics and administrators are available to answer queries.

The Regulations are available at www.cefims.ac.uk/regulations.shtml, setting out the rules by which exams are governed.
**UNIVERSITY OF LONDON**

*Centre for Financial and Management Studies*

*MSc Examination*

*MBA Examination*

*Postgraduate Diploma Examination*

for External Students

91DFMC226
91DFMC326

FINANCE

FINANCIAL MANAGEMENT

FINANCIAL ECONOMICS

FINANCE & FINANCIAL LAW

BANKING

**Banking & Capital Markets**

*Specimen Examination*

This is a specimen examination paper designed to show you the type of examination you will have at the end of the year for Banking & Capital Markets. The number of questions and the structure of the examination will be the same as on this one, but the wording and the requirements of each question will be different. Best wishes for success on your final examination.

The examination must be completed in **THREE** hours. Answer **THREE** questions.

The examiners give equal weight to each question; therefore, you are advised to distribute your time approximately equally between three questions. The examiners wish to see evidence of your ability to use technical models and of your ability to critically discuss their mechanisms and application.

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**PLEASE DO NOT REMOVE THIS PAPER FROM THE EXAMINATION ROOM.**

**IT MUST BE ATTACHED TO YOUR ANSWER BOOK AT THE END OF THE EXAMINATION.**

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Answer THREE questions.

1. Answer both parts of the question.
   a. Discuss the main differences between bank-based and market-based financial systems.
   b. Critically assess the usefulness of the concepts of bank-based and market-based financial systems in the light of your discussion in part (a).

2. In the context of the Allen and Gale model of diversity of opinions and system of financing, discuss the main factors that enhance the use of the market.

3. Answer both parts of the question.
   In the context of the Diamond and Dybvig model of banks as providers of insurance against liquidity risk:
   a. Discuss how banks can smooth an individual's consumption profile.
   b. ‘The Diamond and Dybvig model is based on the transaction cost approach and hence adds little to the question of why banks exist.’ Critically discuss this statement.

4. Answer both parts of the question.
   In the context of the Leyland and Pyle model of information-sharing coalitions:
   a. Explain the adverse selection problem.
   b. Analyse how entrepreneurs can address this adverse selection problem.

5. Answer both parts of the question.
   a. Explain the concept of systemic risk and why this type of risk is prevalent in the banking sector.
   b. ‘The lender of last resort is a very effective way of preventing systemic risk’. Critically discuss this statement.

6. Answer both parts of the question.
   a. Explain the concepts of asymmetric information and adverse selection.
   b. In the context of the De Meza and Webb model, explain how adverse selection can lead to overinvestment.
7. **Answer both parts of the question.**
   In the context of the Allen and Gale model of bubbles and crisis, explain:
   a. Why intermediated finance can lead to the creation of bubbles.
   b. How in some instances bubbles can cause full-blown financial crisis.

8. **Answer both parts of the question.**
   a. Explain the main activities and entities involved in the shadow banking system.
   b. How can ‘runs’ occur in the shadow banking system?

[END OF EXAMINATION]
Banking and Capital Markets
Unit 1 Bank-Based vs Market-Based Financial Systems

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1.2 Financial Intermediaries, Financial Markets and Flow of Funds 5
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Unit Content

The following pages give an introduction to the most important institutions in the financial sector. We provide an overview of different types of financial markets and financial intermediaries. Finally, current theories about financial systems are discussed. In particular, you will come to appreciate the distinction between bank-based and market-based financial systems, and you will study what this distinction implies and how it can be explained.

Learning outcomes

When you have completed your study of this unit and its readings, you will be able to

• discuss the distinction between different types of financial intermediaries
• explain how different kinds of markets may be distinguished
• assess the increased importance of securitisation
• outline and discuss the difference between bank-based and market-based financial systems
• analyse the importance of legal origin in the theory proposed by La Porta and others
• compare the competing explanations proposed by Rajan and Zingales.

Readings for Unit 1

For this unit, you will be reading Chapters 2 and 3 of Allen and Gale, Comparing Financial Systems, and the following items from the Course Reader:

‘Has securitisation gone too far?’ from The Economist (1998)

Jody Sindelar and Tracy Falba (2004) ‘Securitization of Tobacco Settlement Payments to Reduce States’ Conflict of Interest’


1.1 Introduction

In this unit, we provide an overview of the most important features of financial intermediaries, such as banks, and financial markets, such as markets for equities. Those different types of financial institutions – financial intermediaries and financial markets – have developed a certain division of labour but they also interact in important ways. The roles of financial intermediaries and of financial markets in the economy differ between different countries and those differences, captured by the general contrast between economies with ‘bank-based finance and those with ‘market-based’ finance, are a central theme of this course.

Financial intermediaries are not only different from financial markets, but are themselves diverse. For example, banks include commercial banks, investment banks and others. Commercial banks make their money both by charging for operating the payments system (such as handling cheques) and by acting as financial intermediaries, which involves taking deposits, borrowing in other ways, and making loans. The difference between the rates of interest they pay on deposits and what they receive on loans accounts for most of their financial intermediation profit. They usually have a mid-term time horizon in lending.

By contrast, investment banks do not accept deposits on a significant scale and much of their revenue is fee income from transactions they facilitate, such as bond issues or IPOs (initial public offerings of a company’s equities). Such a transaction may involve the bank in work of between a couple of weeks and a couple of months, but rarely longer. In contrast to commercial banks and investment banks, an important type of non-bank financial intermediary – pension funds – have to have an asset investment policy that takes account of their liability for pension payments they will have to make over several decades from now. Rather than maximising profits on short-term investments or in quick transactions, they will be intent on a high level of certainty with which they can provide their payments throughout this period: millions of pensioners depend on them for their long-term livelihood.

Financial markets, too, are diverse and can be distinguished by a large number of criteria, such as what is traded – for example, equities, government (‘sovereign’) bonds, corporate bonds, foreign exchange, or derivatives such as options and futures contracts – and how established, organised and regulated the market place is. Major stock exchanges such as the New York Stock Exchange are highly organised and strictly regulated markets well known for trading corporations’ equities (also called shares, or stocks). Similarly, markets such as the Chicago Board Options Exchange (CBOE), which trades in option contracts, is highly organised. Other major financial markets, such as the ‘over the counter market’ (OTC) in option contracts, are not formally organised by a central market body and involve non-standardised trades.
In this course, banks are the main focus of your studies, but financial markets also have a strong presence in the course for two reasons. One is that we compare economies that have financial systems widely described as ‘bank based’ with those which have ‘market based’ systems. The other is that banks and other financial intermediaries interact with financial markets and both their strengths and their weaknesses are influenced by the nature of those markets and their interaction.

Since it is not enough to look at individual financial intermediaries or individual financial markets in order to understand how a given financial system works in this course, you will also examine the properties of these systems as a whole. And since the importance of the financial system stems from its transactions with individuals, non-financial firms and the government, you will also consider, in places, some aspects of the behaviour of those non-financial agents.

As indicated earlier, one of the basic distinctions between different systems’ properties contrasts bank-based and market-based financial systems, and in the latter part of the unit, these distinctions will be spelled out in more detail. A question that arises when we observe that countries have different systems is ‘why’? In searching for an explanation of why certain financial systems are market based and others bank based, we will explore two theories proposed in recent years. One of these was formulated by La Porta and others in a series of papers in the second half of the 1990s and emphasises the importance of legal traditions for economic development. The other theory, proposed by Rajan and Zingales in an influential paper, gives preference to the conflict between incumbent coalitions and outsiders in explaining the development of financial systems in the twentieth century.

1.1.1 The place of this unit within the course

This unit introduces basic types of financial markets and financial institutions, a good understanding of which is vital to the study of later units of the course. However, not all of the material covered here is merely preliminary: the discussion about bank-based and market-based systems in the latter part of the unit concerns issues that have been central to the academic literature in recent years, and we will refer to it more than once in later units, particularly in Unit 4, where the different functioning of intermediaries and markets is investigated in a more theoretical perspective. We also refer to the distinction in the later units covering bank runs and financial crises (Units 6 and 7).

Remember, then, that the contrast between bank-based and market-based financial systems is a theme that runs through several units of the course even while those units focus their beam on a more specialised issue.

The structure of Unit 1

In Section 1.2, you will become acquainted with different types of financial intermediaries and financial markets.
Section 1.3 introduces the elements of a financial system. Since the nature of financial systems is to continually change and evolve, the unit illuminates such evolution by discussing a particularly important modern example, securitisation, which has led to a rearrangement of the elements of financial systems.

Finally, in section 1.4, we embark on the comparison of financial systems; subsection 1.4.1 discusses dimensions of comparison and introduces two basic types – bank-based and market-based systems. Taking this distinction as a point of departure, section 1.4.2 presents two recent theoretical approaches to explaining how differences have arisen in the real world – the work of La Porta and his colleagues, which emphasises the role legal systems have played, contrasted with Rajan and Zingales’s emphasis on the importance of incumbent coalitions.

Section 5 concludes.

1.2 Financial Intermediaries, Financial Markets and Flow of Funds

This section provides a short overview of different types of financial intermediaries and financial markets. Since we concentrate on the question of what these are, many problematic aspects to be discussed later in the course are not taken up yet.

1.2.1 Financial intermediaries

Financial enterprises are widely known as financial intermediaries (or in popular language they are often called financial institutions). As you will see later in this unit, the range of financial intermediaries that exists in any one financial services industry and the names given to them vary from country to country.

**Commercial banks**

Commercial banks are those banks whose main business involves the taking of both commercial and retail deposits – that is, deposits from both companies and individuals – and making loans to both retail and commercial customers. Commercial banks also engage in wholesale banking activities; that is, borrowing from or lending to other banks through the inter-bank market.

However, in recent decades countries throughout the world have sought to increase competition in banking and have significantly reduced regulations that restricted competition. Since de-regulation, many commercial banks have been able to diversify into non-bank financial services and now offer a wide variety of products and services to their customer base. In the UK, for example, commercial banks may now offer stock-broking and insurance services. In fact, after deregulation, commercial banks have tended to establish financial conglomerates by buying other financial services firms such as
estate agents (real-estate companies) and stockbrokers. For this reason, commercial banks are sometimes now referred to as ‘financial service supermarkets’. Examples of such banks are Barclays, HSBC and National Westminster Bank plc in the UK, while Chase Manhattan and Wells Fargo are notable American examples.

**Investment banks**

These banks provide a more specialist range of products and services. Investment banks and UK merchant banks engage in wholesale financial services provision. They do underwriting or set up financial arrangements for large clients. Their business involves underwriting securities, private banking facilities (for wealthy individuals), capital market transactions, corporate finance and mergers and acquisitions advice and the provision of global custody services. The United States-based J.P. Morgan and Goldman Sachs are good examples of this type of organisation.

**Universal banks**

Universal banking originated in the German system, where banks were allowed to undertake both retail banking and investment banking, providing financial services for corporate clients and holding corporate equities and directorships in companies, sometimes the same companies that they also lent to. Traditionally, this meant that German universal banks could establish far tighter connections with corporate clients than was possible in the more ‘arm’s-length’ commercial banking sectors of the USA or the UK before deregulation.

Since deregulation, there has been a move towards universal banking in many countries including the USA and the UK, either through banks being permitted to have non-bank subsidiary companies, or (in the USA) through a holding company structure in which the holding company owns both bank and non-bank financial subsidiaries.

**Savings banks**

These banks are retail orientated and provide a vehicle for household savings. Such banks are popular in continental Europe, and with very few exceptions they do not transact commercial business. Examples include the Caixa de Barcelona in Spain and the Cassa di Risparmio di Pisa in Italy. In the United States, Savings and Loans (S&L) associations (also known as ‘thrifts’) include both savings banks and mortgage banks, which are dealt with below.

**Co-operative banks**

These are specialist institutions, which provide finance and banking services to specific groups within an economy. These banks are again predominantly European-based and mostly associated with farming and regional activities, such as Credit Agricole in France. Originally, their customer base was limited but over the years it has widened to include anyone within their operating area.
Mortgage banks
Mortgage banks are found in almost all countries, but they may be titled differently. In the United Kingdom, they are usually associated with ‘building societies’ and in the United States they would be classified as savings and loan, or ‘thrift’, institutions, as noted above. Traditionally, their main function is to provide long-term finance for the purchase of homes – e.g. The Halifax Building Society in the UK.

Insurance companies
These companies provide insurance-based products and conduct general insurance as well as life assurance business. Life assurance, in particular, involves financial intermediation on a large scale, for the revenue received as ‘premiums’ are savings of the policy holders, which the life assurance company invests in assets. In many European countries insurance companies are owned by banks. This provides both diversification and a readily available customer base. In the United States, however, banks are prevented from owning insurance companies. One example of an insurer covering general and life assurance has been Norwich Union in the UK.

Investment firms
These firms manage large investment portfolios, which are formed by pension or mutual funds. Mutual funds are defined as ‘pooled investment funds’. They trade on the capital markets in shares, government and private bonds and financial derivatives. Examples of such firms include M & G Securities and Hill Samuel Unit Trust.

Finance firms
These are companies that provide finance to the corporate and retail sector. In the United Kingdom, many large retailers provide credit sales opportunities either through a direct subsidiary or as agents for a large finance company. Many examples are available, including Marks and Spencer Financial Services, Volvo Finance and Sears Credit.

Parastatals
In a number of countries, certain institutions controlled by the government have traditionally played an important role as financial intermediaries: in many countries, the post office also offers financial services, including deposit taking. As a state owned institution the Japanese post office, for example, has for a long time been the largest deposit-taking institution in the world, investing those popular savings in loans to the state and financing of public projects (although plans to privatise the post office have been boosted by Japan’s 2005 election result). Similarly, a number of medium-sized banks, the Landesbanken, are owned by the individual states that make up the Federal Republic of Germany.
1.2.2 **Summary of financial intermediaries**

From this brief overview, you can see that the financial services industry covers a wide array of institutions that act as financial intermediaries. Often there are considerable overlaps in the type of products and services they offer. Customers have a much wider choice now than they used to have, but from the perspective of financial intermediaries, increased competition has cut their margins and forced each to seek new marketing and operating strategies.

1.2.3 **Financial markets**

There are numerous ways in which it is possible to distinguish between financial markets of various types. A selection of them is described below:

- money and capital markets
- debt and equity markets
- cash and derivative markets
- official and curb (kerb) markets
- primary and secondary markets.

**Money and capital markets**

The distinction between money and capital markets rests on the maturity of the securities traded in each market. Typically, short-term securities (with a maturity of less than one year) are traded in the money markets. The best known of such securities are probably *Treasury bills*. These are government securities with a maturity of three to twelve months and thus are seen as approximately risk-free securities. A strong, active money market is an important foundation for strong commercial banking and in the next section you will look at the role of banks in the money markets in more detail.

Long- (and medium-) term securities are traded on the capital markets, the most significant of which are the equity and bond markets. Institutional investors (insurance companies and pension funds) and specialist agents such as investment banks (see below), brokers and dealers are the major players in the capital markets.

**Debt and equity markets**

This refers to a distinction within capital markets. An enterprise typically can raise funds in the capital markets in two distinct ways. First, it can issue or sell a debt instrument such as a bond, or raise a loan from a bank.\(^1\) In this course, we focus on bank loans more than on debt securities such as bonds. A bond is a promissory note that promises to repay the investor the principal and an agreed rate or amount of interest.

The second main way in which an enterprise can raise finance is through the issue of equities such as common stock (US) or ordinary shares (UK).

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\(^1\) The markets for bonds and bank loans are collectively known as debt markets. While bonds tend to be long-term financial assets, bank loans typically are short- to medium-term assets, but both pay a rate of interest.
Equities represent future claims on an enterprise’s net profits and a residual claim on its net assets in the case of liquidation. Equity holders receive periodic (typically annual) payments, called dividends, from the enterprise. Equities are viewed as long-term securities since they have no final maturity date, unlike most bank loans and bonds.

**Spot and futures markets**

This distinction hinges on the delivery date of the security. Spot market securities are traded for (virtually) immediate delivery while futures are traded for delivery at some time in the future. Futures are known as derivatives, as are options and swaps, because their value is derived from the value of the underlying security (in this case the security which, under the futures contract, is to be delivered in the future). The financial derivative markets have grown spectacularly since their inception in the 1970s and 1980s.

**Official and curb (kerb) markets**

In developing countries, a distinction is frequently made between official and curb markets. Official markets are (officially) regulated by appropriate authorities such as central banks. Curb markets are unregulated markets. In advanced economies, unregulated markets are known as ‘parallel markets’. The best example of such markets were the early eurodollar markets, which were markets for US dollar deposits in Europe and elsewhere that were not subject to regulation by the US Federal Reserve.

**Primary and secondary markets**

This distinction hinges on the age of the securities. The primary markets are those markets in which securities are issued (sold) for the first time and where the funds raised go to the enterprise issuing the securities. Once securities have been issued, they are subsequently traded as claims to ownership on secondary markets. The best-known examples of secondary markets are stock markets, or stock exchanges, where large already existing stocks of equities are traded.

### 1.3 The Financial System

Financial intermediaries interact in financial markets with each other and with other social actors, including the government, regulatory authorities, consumers and non-commercial firms. The following section provides a model of financial flows within such a system. By contrast, in section 1.3.2, which concerns the practice of securitisation, it will emerge that these modes of interaction within financial systems are not fixed once and for all: rather, banks and other receivers of future streams of interest and capital repayments (or any stream of future revenue) have in recent years relied on the practice of reselling bundles of claims, a practice that may be seen as a kind of re-engineering of how financial systems work.
1.3.1 Financial systems and the flow of funds

A financial system may be defined as a group of institutions, markets and regulations enabling the allocation of resources within time and space (Levine, 1997). Financial markets and financial institutions interact and combine in various ways to constitute a country’s financial system. The financial system of a country summarises those interactions in a particular structure, as you will see in section 1.4. For now, we focus on the flow of funds within a financial system.

The financial position of any agent (in the broadest sense, ranging from individuals to whole sectors of the economy) can be summarised as follows:

\[ S - I = \Delta A - \Delta L \]

where \( S \) and \( I \) are savings and investment, and \( \Delta A \) and \( \Delta L \) are the changes in total assets and liabilities. If the agent saves more than it invests it accumulates more assets than liabilities or, in other words, its net wealth increases and it is defined as having a financial surplus. These differences summarise the net financial surplus or deficit of any sector. Typically, the personal sector is a surplus sector, and the company and government sectors are deficit sectors.

This conceptual framework allows a deeper understanding of the concepts of direct and indirect finance first developed by John Gurley and Edward Shaw, the founders of modern theories of the role of finance, in their 1960 book, *Money in a Theory of Finance*.

Let us divide the economy into four great sectors which are ‘non financial’ in the sense that finance is not their main business:

- households
- firms
- government
- foreign sector (rest of the world).

We can use that division to pinpoint the role of the financial system. In flow-of-funds accounting, the surplus of one sector always equals the sum of the deficits of other sectors (with the opposite sign). For example, the surpluses of the household and foreign sectors equal the deficits of firms (businesses) and government; therefore, there are net flows of finance from the surplus sectors to the deficit sectors.

Those net flows go through the financial system (or financial sector), but there are two basic routes through it. One involves direct finance: firms, for example, which obtain finance directly from households by selling them bonds or new equities. To have a significant role, that could only occur through a financial market, a stock market. But even that route is not as direct as it used to be since a large part of new issues of securities are purchased not by individuals but by pension funds and insurance companies, financial intermediaries which managing household savings placed with them as pension contributions or insurance premiums.
The second route involves indirect finance: surplus units such as households lend their funds to financial intermediaries, which themselves lend to deficit units such as firms (or finance them in other ways). These are the two basic or pure routes by which funds flow through a financial system in a simple model. In reality, there are more complex flows too, which combine different elements.

One point is that not all firms’ finance comes from outside the firm or the firm sector; much of their investment is financed from their own saving (retained profits). Another point is that financial intermediaries and markets are not purely separate, alternative, channels for finance. As you will see in the next subsection, financial intermediaries operate on markets, buying and selling securities, instead of only receiving non-marketable deposits and making non-marketable loans.

### 1.3.2 Securitisation and flow of funds

Unless prevented from doing so by regulation, the different routes identified above compete with each other. In recent years, there have been some structural shifts in the flows of funds, especially in the US, where the indirect finance route has given way to direct finance routes. The reasons for this so-called disintermediation are varied. In this section, we will focus on one important factor, securitisation, which represents a major change that has taken place in banking and capital markets.

Cunning (1987) defines securitisation broadly as a process in which borrowers and savers are wholly or partly matched through financial markets. This definition, broadly taken, includes the following:

- firms issuing more financial securities such as bonds and equities relative to their reliance on loans from banks and other intermediaries
- deposit replacement
- asset-backed securitisation.
Financial securities instead of loans

The issue of financial securities in the capital markets as opposed to obtaining loans is a type of securitisation that comes in two varieties: it may be realised as a direct replacement of debt claims, where a firm replaces a bank loan by a sale of securities (such as a bond or equity) in financial markets. It is important to note that issuing these securities is mostly organised by financial institutions such as investment banks, which receive a fee income. The second possibility is the direct replacement of a debt claim underwritten by financial institutions in which the financial institution will agree to buy up any short-term and long-term securities not taken by financial markets. In return, the financial institutions receive a fee income.

The main reason for this type of securitisation is the existence of many borrowers with high credit ratings, which enable them to raise finance by tapping markets at a cost that is lower than that of a bank loan.

Deposit replacement

Deposit replacement occurs because investors have found other places to deposit funds that were traditionally placed in savings accounts. Examples are mutual funds, money markets funds and other retail investment products. Non-bank financial institutions accept funds that would have ended up in savings accounts twenty years ago and then use them to purchase both real and financial securities. These funds could be seen as financial intermediaries, but often they are not because the assets they buy are to some degree directly owned – as shares in a pool of assets – by the depositors.

Asset-backed securitisation

This involves the repackaging of assets from within the lending portfolios of banking institutions in order to create a financial asset that can be sold in the capital markets. It is useful to consider bank lending as constituting a bundle of services:

- loan origination, which involves locating a creditworthy borrower and providing her with a loan
- loan warehousing, which involves holding the loan on the bank’s balance sheet
- loan servicing, which involves collecting payments of interest and principal and administering and enforcing the loan contract
- loan monitoring, which involves conducting periodic surveillance to ensure that the borrower has maintained her financial viability.

Asset-backed securitisation is sometimes described as the fragmentation of traditional lending; it involves originating the loan, repackaging it and then selling it in the capital markets. Notice that securitisation does not eliminate the role of banks in the intermediation process. While retaining the overall function of intermediation, the bundle of activities is sold separately. Securitisation can provide the banks with a mechanism that enables them to move assets off their balance sheets, and thus enhance their liquidity, reduce their
capital requirements, diversify or reduce the risk in their lending portfolios and improve the quality of their assets.

This can be a useful addition to off-balance-sheet risk management methods. Nowadays, there are many categories of securitised assets: collateralised debt obligations, which include collateralised loan obligations and collateralised bond obligations, credit card obligations, auto-loans, consumer loans and, most importantly, mortgages: in the USA and Europe, mortgage-backed securities (MBS) constitute the largest component of securitised assets.

Reading
First, please read the article ‘Has securitisation gone too far?’, and write down your answer to the following question.
- What are the limitations of securitisation pointed out in the article?

Then, for an illustrative example of a controversial securitisation, you should read the article by Sindelar and Falba, ‘Securitization of Tobacco Settlement Payments’.

Despite the increasing trend towards securitisation in some financial systems, it remains limited to certain countries and to certain types of loans, where credit risk is relatively easy to assess or for which indirect monitoring mechanisms are possible. Although individual examples of far more exotic securitisations do exist, they are not as common as the publicity they receive might suggest.

In most financial systems of the world, indirect finance remains the dominant mode for flow of funds between surplus and deficit agents. In most countries banks are the dominant providers of external finance for firms and governments and, in addition to operating the payments system, the core of banking still consists of receiving non-marketable deposits and making non-marketable loans. As you will see later in this course, this has important implications for the way we approach the study of banks and capital markets.

1.4 Comparing Financial Systems

The different elements of financial systems discussed in the previous section do not interact in the same way in all societies and at all times. Rather, there are systematic differences between financial systems around the world. One of the most crucial axes of differentiation has undoubtedly been the contrast between bank-based and market-based financial systems, a distinction that is discussed in detail in the subsections below (1.4.1 and 1.4.2).

But why do such differences exist? The contrasts can be explained in different ways. We will study two explanations, that of Rafael La Porta and his colleagues (1997), who locate the main reason for these differences in the legal systems of the countries involved, and that of Raghuram Rajan and Luigi Zingales (2003), which privileges the role of incumbent coalitions over legal traditions.
1.4.1 Bank-based vs market-based financial systems

Each country’s financial system has been shaped by a number of historical factors including the social, cultural, legal and political environment, which have resulted in different countries having different types of financial systems. It is widely acknowledged that the way in which financial markets and financial institutions interact in the financial systems of Japan and Germany, for example, is significantly different from the functioning of the financial systems of the United States and Britain. The financial systems of the two former countries are dominated by banks – we usually refer to them as bank-based systems. On the other hand, in the financial systems of the US and Britain, stock exchanges have a more prominent place. In the literature, they are frequently called market-based systems.

For instance, the system of universal banking that has developed in Germany since the nineteenth century has features which have enabled banks in that country to play a special role in monitoring and controlling the enterprises they finance. German banks provide a substantial part of external finance to companies, and handle the bulk of their issues in the capital markets. The banks maintain close links with their industrial clients through these channels, but also through an extensive presence on the supervisory boards of companies, and substantial control of shareholder voting rights through ownership and control of shares by proxy, which retail investors deposit at the banks. The close involvement of German banks with industry allows them to create what is in effect an internal capital market, allocating within the circle formed by a bank and the firms to which it is closely linked and without competitive pressure from outside the circle.

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Reading

Please read Sections 2.2, 2.3, and 2.4 of Allen and Gale (2000). Your notes should cover the following questions:

- What are the implications of this historical account?
- To what extent has historical accident been responsible for the development of bank-oriented and market-oriented financial systems?

Allen and Gale provide a very interesting historical account of the development of the five most important financial systems in the world: the United States and the United Kingdom (which the authors consider as market-oriented systems) and Germany, Japan and France (which they describe as bank-oriented systems). Their historical review leads the authors to derive four interesting implications:

- A wide range of different financial systems exists in the industrialised world.
- Imperfections are important.
- Financial systems show signs of fragility and thus are subject to crisis.
- Governments and central banks play an important role in regulating financial systems.

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The range of financial institutions that exists in any one financial system and the names of the institutions also vary considerably from one country to another. Chapter 3 of Allen and Gale provides an interesting description of the various markets and financial institutions in the USA, the UK, Germany, Japan and France.

**Reading**

Please read Chapter 3 of Allen and Gale (2000).

As you will have noticed from your reading of Chapters 2 and 3, the classification of financial systems into bank-based and market-based is a complex issue, and depending on the criteria used you may end with different classifications of countries’ systems, some of which may fall in between these two. However, despite these problems, many scholars still rely on various axes of differentiation for this distinction. The most widely used are the following:

- the size of banks and the stock market relative to the economy
- household portfolio allocation
- ways of raising funds.

**The size of banks and stock market relative to the economy**

In the USA and UK, so-called Anglo Saxon countries, banks appear to be relatively less important than financial markets, especially when compared to France, Germany and Japan. This is reflected partly in the relative size of the stock market (measured by stock market capitalisation) to GDP, a ratio which is much higher in the US and the UK than in Germany, France or Japan. On the other hand, the ratio of bank assets to GDP in Germany is more than three times the ratio in the US.

**Table 1.1 International Comparison of Banks and Markets, 1993 (billions of dollars)**

<table>
<thead>
<tr>
<th></th>
<th>GDP ($)</th>
<th>Banking assets (BA) ($)</th>
<th>BA/GDP (%)</th>
<th>Equity market capitalization (EMC) ($)</th>
<th>EMC/GDP (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>6,301</td>
<td>3,319</td>
<td>53</td>
<td>5,136</td>
<td>82</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>824</td>
<td>2,131</td>
<td>259</td>
<td>1,152</td>
<td>140</td>
</tr>
<tr>
<td>Japan</td>
<td>4,242</td>
<td>6,374</td>
<td>150</td>
<td>2,999</td>
<td>71</td>
</tr>
<tr>
<td>France</td>
<td>1,261</td>
<td>1,904</td>
<td>151</td>
<td>457</td>
<td>36</td>
</tr>
<tr>
<td>Germany</td>
<td>1,924</td>
<td>2,919</td>
<td>152</td>
<td>464</td>
<td>24</td>
</tr>
</tbody>
</table>

Allen and Gale, 2000: 47

**Household portfolio allocation**

In Anglo-Saxon countries, firms’ equities constitute a major proportion of the assets held by households. In Japan, Germany and France, households hold a large fraction of their portfolio in liquid assets (cash and cash equivalents). In these countries, direct participation in equity markets has also been falling. Given the importance of this distinction, we discuss this in some detail.

Financial assets held by the household sector differ considerably between market-based and bank-based systems. As Table 1.2 shows, shares and other equity constitute a third of household wealth in the US. However, this
underestimates the importance of equity in US household portfolios since it does not take into account indirect holdings of equity through mutual funds, life insurance and pension funds, which together constitute around 44% of household wealth in the US. For instance, as Table 1.3 shows, equity constitutes 77.4% of mutual funds held by households in the United States. Notice the decline in the importance of bonds in mutual funds from 29% in 1995 to around 16% in 2000. As to currency and other deposits, these are generally unimportant, declining from around 14% in 1995 to 11% in 2000.

Table 1.2 Composition of household wealth in the United States (in %)

<table>
<thead>
<tr>
<th>USA</th>
<th>1995</th>
<th>2000</th>
<th>Change taken as a difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency and other deposits</td>
<td>14.1</td>
<td>11.1</td>
<td>-3.02</td>
</tr>
<tr>
<td>Money market funds</td>
<td>2.2</td>
<td>3.1</td>
<td>0.93</td>
</tr>
<tr>
<td>Securities other than shares</td>
<td>9.4</td>
<td>6.4</td>
<td>-2.96</td>
</tr>
<tr>
<td>Shares and other equity</td>
<td>32.0</td>
<td>33.1</td>
<td>1.07</td>
</tr>
<tr>
<td>Mutual funds</td>
<td>9.6</td>
<td>12.9</td>
<td>3.33</td>
</tr>
<tr>
<td>Life insurance</td>
<td>7.1</td>
<td>7.1</td>
<td>0.03</td>
</tr>
<tr>
<td>Pension funds</td>
<td>23.4</td>
<td>23.8</td>
<td>0.40</td>
</tr>
<tr>
<td>Others</td>
<td>2.3</td>
<td>2.5</td>
<td>0.22</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Bebeau and Sbano (2002) Table 16

Table 1.3 Composition of Mutual Funds held by households in the United States
(as % of all Mutual Funds)

<table>
<thead>
<tr>
<th>USA</th>
<th>1995</th>
<th>2000</th>
<th>Change taken as a difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>60.7</td>
<td>77.4</td>
<td>+16.7</td>
</tr>
<tr>
<td>Bond</td>
<td>29.1</td>
<td>15.8</td>
<td>-13.3</td>
</tr>
<tr>
<td>Hybrid</td>
<td>10.2</td>
<td>6.8</td>
<td>-3.4</td>
</tr>
</tbody>
</table>

Bebeau and Sbano (2002) Table 17

The picture is quite different in Japan, as can be seen in Table 1.4. First, a relatively high proportion of household assets in Japan (around 53% in 2000) are held in liquid form mainly in the form of currency and deposits, saving deposits and time deposits. The holding of equity (both listed for trading on the stock market and unlisted) is relatively unimportant, constituting around 10% of total households’ assets. Notice that this ratio has declined since 1995, most probably due to the poor performance of the Nikkei stock index.

Table 1.4 Composition of household financial wealth in Japan (in %)

<table>
<thead>
<tr>
<th>JAPAN</th>
<th>1995</th>
<th>2000</th>
<th>Change taken as a difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency and deposits</td>
<td>8.20</td>
<td>11.44</td>
<td>3.21</td>
</tr>
<tr>
<td>Time deposits, saving deposits &amp; others</td>
<td>41.20</td>
<td>41.43</td>
<td>0.23</td>
</tr>
<tr>
<td>Money market funds</td>
<td>0.30</td>
<td>0.23</td>
<td>-0.08</td>
</tr>
<tr>
<td>Securities other than shares</td>
<td>7.88</td>
<td>4.49</td>
<td>-3.38</td>
</tr>
<tr>
<td>Listed shares</td>
<td>6.22</td>
<td>4.97</td>
<td>-1.25</td>
</tr>
<tr>
<td>Unlisted shares and other equity</td>
<td>4.83</td>
<td>3.29</td>
<td>-1.54</td>
</tr>
<tr>
<td>Mutual funds</td>
<td>2.12</td>
<td>2.37</td>
<td>0.24</td>
</tr>
<tr>
<td>Life insurance</td>
<td>16.72</td>
<td>17.67</td>
<td>0.95</td>
</tr>
<tr>
<td>Pension funds</td>
<td>7.54</td>
<td>9.71</td>
<td>2.17</td>
</tr>
<tr>
<td>Others</td>
<td>4.99</td>
<td>4.41</td>
<td>-0.58</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Bebeau and Sbano (2002) Table 19
At the end of 2000, the composition of household wealth varied significantly across Europe. In Spain, Germany and France, more than 30 percent of household financial wealth was still held in banks and similar institutions. In the United Kingdom, the claims on mutual funds, life insurance companies and pension funds accounted for more than 55% of households’ assets. In the Netherlands this ratio is higher: 58.6% of households’ assets are held with mutual fund, pension funds and life insurance.

Table 1.5 Composition of financial assets in six European countries at the end of 2000 (in %)

<table>
<thead>
<tr>
<th></th>
<th>Italy</th>
<th>France</th>
<th>Germany</th>
<th>Netherlands</th>
<th>Spain</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency and deposits</td>
<td>24.0</td>
<td>30.4</td>
<td>33.9</td>
<td>18.1</td>
<td>36.2</td>
<td>22.2</td>
</tr>
<tr>
<td>Money market funds</td>
<td>0.8</td>
<td>1.4</td>
<td>0.8</td>
<td>0.4</td>
<td>2.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Securities other than shares</td>
<td>18.7</td>
<td>2.7</td>
<td>10.1</td>
<td>2.3</td>
<td>1.9</td>
<td>1.3</td>
</tr>
<tr>
<td>Listed shares</td>
<td>8.9</td>
<td>5.0</td>
<td>5.9</td>
<td>11.5</td>
<td>11.0</td>
<td>8.9</td>
</tr>
<tr>
<td>Non-listed shares</td>
<td>18.7</td>
<td>19.8</td>
<td>9.7</td>
<td>5.3</td>
<td>22.7</td>
<td>8.5</td>
</tr>
<tr>
<td>Mutual funds</td>
<td>15.9</td>
<td>9.0</td>
<td>10.5</td>
<td>5.5</td>
<td>9.9</td>
<td>5.8</td>
</tr>
<tr>
<td>Life insurance</td>
<td>6.2</td>
<td>23.3</td>
<td>13.6</td>
<td>15.4</td>
<td>6.2</td>
<td>27.5</td>
</tr>
<tr>
<td>Pension funds</td>
<td>1.2</td>
<td>1.5</td>
<td>5.2</td>
<td>37.7</td>
<td>5.3</td>
<td>22.1</td>
</tr>
<tr>
<td>Others</td>
<td>5.5</td>
<td>6.9</td>
<td>10.2</td>
<td>3.8</td>
<td>4.3</td>
<td>3.7</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Raising Funds

As Allen and Gale conclude, the distinction between bank-based and market-based systems is less clear-cut. This is because, regardless of the financial system found in a given country, retained earnings are likely to be favoured over other types of finance in both market-centred and bank-centred systems in a number of countries. Except for Japan, all countries considered rely most heavily on retained earnings.

Table 1.6 Unweighted gross financing of nonfinancial enterprises, 1970–1985 (% of total)

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>UK</th>
<th>Japan</th>
<th>France</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retentions</td>
<td>66.9</td>
<td>72.0</td>
<td>33.7</td>
<td>44.1</td>
<td>55.2</td>
</tr>
<tr>
<td>Capital transfers</td>
<td>0.0</td>
<td>2.9</td>
<td>0.0</td>
<td>1.4</td>
<td>6.7</td>
</tr>
<tr>
<td>Short-term securities</td>
<td>1.4</td>
<td>2.3</td>
<td>N.A.</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Loans</td>
<td>23.1</td>
<td>21.4</td>
<td>40.7</td>
<td>41.5</td>
<td>21.1</td>
</tr>
<tr>
<td>Trade credit</td>
<td>8.4</td>
<td>2.8</td>
<td>18.3</td>
<td>4.7</td>
<td>2.2</td>
</tr>
<tr>
<td>Bonds</td>
<td>9.7</td>
<td>0.8</td>
<td>3.1</td>
<td>18.3</td>
<td>0.7</td>
</tr>
<tr>
<td>Shares</td>
<td>0.8</td>
<td>4.9</td>
<td>3.5</td>
<td>3.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Other</td>
<td>–6.1</td>
<td>2.2</td>
<td>0.7</td>
<td>0.7</td>
<td>11.9</td>
</tr>
<tr>
<td>Statistical adjustment</td>
<td>–4.1</td>
<td>–9.4</td>
<td>N.A.</td>
<td>–4.7</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.1</td>
<td>99.9</td>
<td>100.0</td>
<td>99.9</td>
<td>99.9</td>
</tr>
</tbody>
</table>

It is interesting to observe that this reliance is far higher in the case of the two market-based systems than in the credit-based systems: at 66.9% (US) and 72% (UK), the preference for internal finance is far higher in the market-based systems than in the bank-based ones. Equally in line with predictions, loans are more important in France and Japan than in the US and Britain.
However, loan levels are about the same in Germany, Britain and the US, and the country that relies most on shares for financing is not a market-based economy, but France, otherwise a classical example of a bank-based financial system.

Review Question

How useful is the concept of market-based and bank-based finance in the light of the discrepancies just discussed?

Sceptics may think these discrepancies important enough to abandon the dichotomy of bank-based and market-based finance altogether. Nevertheless, for a significant number of phenomena, the distinction does appear to make sense. A final conclusion to the argument can only be hoped for after we have seen how these theoretical concepts are put to use. If we accept the reality of the distinction, a couple of further questions present themselves:

- Why do these differences exist?
- What are the implications of these differences for corporate governance structures?
- Do different financial systems lead to different levels of economic growth?
- What do banks do? What do capital markets do? Are they different from one another as regards the tasks they perform with respect to financial exchange?

Not all of these questions will be answered in this unit, and not all of the answers given here and elsewhere may satisfy you. The next subsection presents attempts to answer the first question; Unit 5 addresses the second and third questions; the last question is the subject of Units 2, 3, 4 and 5.

1.4.2 Law, politics and financial systems

There have been different attempts to explain the differences in financial systems across countries. In this subsection, we present two recent attempts: La Porta et al. base their explanation on the origins of the legal system, while Rajan and Zingales argue that political factors (such as the centralisation of the political system) are more important in determining the financial structure of the country than the origins of the legal systems.

Financial systems and law

Since the mid-1990s, a series of articles by a group of economists including Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert Vishny, has attempted to link the systematic differences between financial systems to differences in the corresponding legal systems.

For historical reasons, most countries of the world follow legal codes that stand either in the tradition of Roman civil law or in that of Anglo-Saxon common law. The differences between the two systems are many, but some of the most salient ones are the following.
Civil law is based on codices, collections of laws issued by the authorities that attempt to define the legal obligations that individuals are to have in their dealings with each other and with the state. On the other hand, common law is case law, based on the decisions of judges that follow rules of precedent, which might later form the basis for legislation.

The English-speaking countries and most of their former colonies have adopted common law. Most developing countries and continental Europe, by contrast, stand in the civil law tradition.

La Porta and his colleagues argue that common law provides better investor protection than civil law. Since a good legal environment reduces the risk of expropriation that investors face, particularly due to the principal-agent problem, they predict that financial markets will be more important and more vital in common-law countries, where investor protection is better.

Their paper subjects different aspects of this argument to econometric analysis, which, by and large, appears to reconfirm the existence of weaker investor protection in civil law countries and the greater importance of external finance in common law countries.

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**Reading**

Please read the article by La Porta at al (1997).

As you read, write notes in answer to the following questions.

- Why should law matter for the financial structure?
- Do you agree that the type of law is decisive?
- How about the quality of enforcement?

---

La Porta and his fellow authors muster a significant amount of data in support of their main argument – the importance of the legal system for the development of financial systems and for the kind of financing that occurs in them. However, their theory does not explain what it is about civil law that has prevented it from developing the same level of investor protection as common law systems. Could better laws remedy all of this? Or is there some basic feature in societies with civil law that prevents them from developing more company-friendly legal systems?

At the end of their article, they suggest that the presence or absence of trust might be of importance. But how comfortable should we be with an explanation of financial performance that relies on legal origin possibly depending on levels of trust in societies, rather than the legal system, and trust is certainly not easy to measure? Somewhere, a convincing transmission mechanism may be lacking in their theory.

**The influence of incumbent coalitions**

Focusing on similar questions to La Porta and his colleagues, to whom they explicitly refer, Rajan and Zingales (2003) provide an alternative account of why financial systems develop the way they do.
Their point of departure depends on a number of stylised facts.

- In 1913, financial systems in general were more developed than at any other point before the late 1990s: stock markets played a bigger role in many countries, with the number of listed companies per million people at a similar level as in 1980.
- However, certain countries that had some of the most advanced financial markets in 1913, such as Germany, France, and Russia, did not necessarily retain this pioneering role throughout the century. While these countries were ahead of the US at the beginning of the century, they had become laggards after World War II.
- Indicators of financial development, such as the ratio of bank deposits to GDP, as well as equity issues, the number of companies listed, and stock market capitalisation to GDP, show that financial development in the twentieth century was not continuous. Rather, these indicators drop after 1913 until a point in time somewhere between 1930 and 1950, and then increase slowly, only reaching their original level at the very end of the century.

How can this puzzle be explained? Although financial development has a positive effect for the economy as a whole, not everybody is a winner. Rajan and Zingales point out that there is a group that may have a vested interest in not having developed financial markets:

> Consider, for instance, established large industrial firms in an economy, a group we will call industrial incumbents. In normal times, these incumbents do not require a developed financial system. They can finance new projects out of earnings (as most established firms do) without accessing external capital markets. Even when their business does not generate sufficient cash to fund desired investments, they can use the collateral from existing projects and their prior reputation to borrow. Such borrowing does not require much sophistication from the financial system. Even a primitive system will provide funds willingly against collateral. Because of their privileged access to finance in underdeveloped financial systems, incumbents enjoy a positional rent. Anybody else who starts a promising business has to sell it to the incumbents or get them to fund it. Thus, not only do incumbents enjoy some rents in the markets they operate in, but they also end up appropriating most of the returns from new ventures.

Rajan and Zingales (2003:18)

Incumbent capitalists and bankers can, hence, obtain excess profits (known as rents) from the opacity of underdeveloped financial systems, and they may be expected to display at least passive resistance to financial development when the political circumstances allow this.

In periods of economic openness, a virtuous circle of economic liberalisation and financial development may occur, but World War I and the Great Depression of the early 1930s provided two very different shocks. In WWI, the role of governments expanded dramatically, and the demands of labour for a share of social wealth became harder to ignore. Free trade recovered after the war, but when the shock of the Depression demonstrated to all and sundry the vagaries of free trade and laissez-faire, many economies settled at a new, less open, equilibrium. From this protectionist stance, which was far less severe in the US than in other parts of the world, most countries only emerged after the collapse of the Bretton Woods system in the early 1970s.
Reading

Please read the original paper by Rajan and Zingales (2003).

Be sure your notes enable you to answer the following question.

- Rajan and Zingales propose an alternative account of financial development in the twentieth century. What are the main features of this account? In your opinion, is it compatible with the theses of La Porta et al.? Why (not)?

1.5 Conclusion

In this unit, we have gradually set the scene for the rest of the course: the main players, be they financial intermediaries and markets, were introduced separately.

We then went on to reflect on the systematic connection that is established between these players as they start interacting with each other and with other groups in society, forming a financial system. The relations between different elements in such a system are not fixed once and for all: by studying the phenomenon of securitisation, you should be able to appreciate how the boundaries between certain parts of the system may shift.

Finally, the attempt was made to compare financial system. Here, the opposition of market-based and bank-based systems provides a useful starting point, but it does not provide an explanation of the phenomena by itself. Two efforts to provide such an explanation were presented, however: Rajan and Zingales (2003) and La Porta et al. (1997) provide two competing theories of the factors that determine financial development.

This unit has provided an overview of different issues that will re-emerge in the following units of this course, as you study in more detail what the mechanisms may be that keep banks and markets in motion.
References


