

ITF 208-Financial Macroeconomics

7 & 10 March 2011

PART I AN INTRODUCTION TO FINANCE AND MACROECONOMICS

1 The Basics of Financial Markets and Financial Institutions

Introduction

What is Financial Intermediation and Why is It Different from Other
Economic Transactions?

What is Money?

The Importance of Financial Systems in Stimulating Long-Run Growth

The Empirical Evidence on Financial Development
and Growth

The Four Primary Forms of Financial Intermediation

Conclusions

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Panics, Crashes, and Crises

Todd A. Knoop

Financial Intermediation: Involves an element of time. An exchange is made for something now but for the promise of something in the future.

This involves: Significant uncertainty and risk for lenders. Will I get my money back (borrowers' ability or willingness to repay in the future)?

The risk comes from a lack of perfect knowledge of the future: Imperfect information!

Borrowers know better than lenders. Economists refer to the fact that borrowers know more than a lender as asymmetric information.

Since Adam Smith (1776), it is recognized that the existence of imperfect and asymmetric information means that markets are not perfectly competitive.

This situation requires government intervention in financial systems aimed at alleviating information problems and increasing the incentives for lenders to provide financial intermediation to borrowers.

This why the financial sector, institutions and instruments are among the most widely regulated sector of modern economics.

Proper Government Regulation (to combat information problems) focusing on achieving:

1. Improve the quality of financial information available to financial institutions and investors (reporting requirements).

2. Stabilize the financial system by limiting the risk exposure of banks and other financial institutions to publicly disclose relevant financial information. Governments also provide deposit insurance! WHY?

2.1. Capital requirements that restricts banks to control their engagement in many activities without holding an adequate level of capital.

TASK (1): Get to know more about FED, FDIC, SEC, OCC, OTS, CFTC and other regulatory bodies.

3. To serve as an arbiter of the legal arrangements associated with financial intermediation. Governments also play an important role in legally protecting borrowers that are in financial difficulties by allowing the to declare bankruptcy and restructure their payments.

TASK (2): Get to know more about FSB, BIS, IOSCO, ESMA, ECB, IFRS, IAS, G-20 and other international regulatory bodies.

TASK (3): Get to know more about rescue package (stimulus package) of the US, UK and the EU.

TASK (4): Get to know more about Istanbul Approach (named after London Approach).

What is Money?

Hard to define clearly! What about checks, T-Bills, credit cards, bonus, maximiles, and e-money? In the US, the FED uses M1 and M2. As can be seen below M2 are less liquid than assets in M1.

Table 1.1 Measures of the Money Supply in the U.S.

	<i>Value^a</i> <i>(\$ Billions)</i>	<i>Percentage</i> <i>of GDP^b</i>
M1 = Currency	742.5	
+ Traveler's check	6.9	
+ Demand deposits	328	
+ Other checkable deposits	316.6	
Total M1	<u>1394</u>	11
M2 = M1		
+ Savings deposits and money market deposit accounts	3619	
+ Small-denomination time deposits	1049.3	
+ Retail money funds	734.2	
Total M2	<u>6796.5</u>	52

^a Value as of May 2006, seasonally adjusted.

^b GDP data from first quarter 2006.

Source: Federal Reserve Statistical Release H.6, June 16, 2005 at <http://www.federalreserve.gov/releases/h6/>, Federal Reserve FREDII database at <http://research.stlouisfed.org/fred2/>.

No other money at all?

The US Treasury estimates that at least 2/3 of the total currency is held outside the country. Why?

Because US\$ is a liquid and relatively safe means for foreigners to save and it is the standard currency for international transactions.

Some of these dollars are held in banks and other financial institutions outside US borders is called *Eurodollar accounts*.

Some are in the underground and illegal economies!

Q: *How much measures such as M1 and M2 can really tell us about the actual amount of money circulating in the US economy?* **Also visit**
<http://www.tcmb.gov.tr/ucaylik/ua12/a67.pdf>

The Importance of Financial Systems in Stimulating Long-Run Growth

A system that promotes efficient financial intermediation is crucial to developing well-functioning economies.

Modern macroeconomic theory has highlighted six primary avenues through which financial development stimulates long-run growth:

1. *Financial development helps borrowers and lenders hedge, pool and diversify risk*: Risk is an integral part of financial transactions because of imperfect and asymmetric information.

1.1. *Hedging risk* (fin. instruments, risk transfer)

1.2. *Pooling risk* (aggregating small amts of savings to distribute the risk of assets purchased)

1.3. *Diversifying risk* (purchase large portfolios, risk associated with single asset is spread over)

2. Financial development reduces risk by increasing liquidity:

Firms need long-term financing for long-term projects. Increase in the volume of trade is necessary. Since long-term assets are not attractive, a secondary market sorts out this problem. When savers see that they can more easily sell long-term assets easily, they are more likely to purchase them.

This encourages investment, production, and long-run growth.

3. Financial development increases the amount of aggregate savings in an economy:

This in turn increases investment and aggregate production. Better financial systems increase the returns to saving by creating the conditions that funds can be used more productively. Lower risk and higher return increase the incentive to save (and of course the amt. Of loanable funds available to firms and other borrowers).

Bagehot (1873) one of the first and most insightful observers of modern financial systems, argued that industrial revolution was fueled by the development of financial systems (see also John Hicks, 1969).

4. Financial development allows financial systems to more efficiently allocate resources:

Information is one of the key inputs in financial systems. But it is costly to obtain too. However, as financial systems get larger, they are able to take advantages of *economies of scale in gathering of information*.

Discussion Point (1): *Why do banks are better source of information? Are they really good to minimize information asymmetries? How does better information help facilitating growth? What are meant by monitoring and screening process?*

Discussion Point (2): *Briefly discuss Joseph Schumpeter's (1911) regarding banking systems, information and long-run growth (page 19).*

5. *Financial development facilitates trade:*

Without financial intermediation, you can make many transactions! It will be virtually impossible to obtain sources for small firms. Consumers fail to access financing for better living! And of course investment projects turn out to be a theoretical one!

As Adam Smith first noted, specialization is the cornerstone of productivity growth.

By facilitating trade and specialization, financial development stimulates productivity, aggregate demand, aggregate supply, and improves standard of living.

REMEMBER TO NOTE IMPORTANT POINTS & PHRASES TO BETTER USE/REFER IN FOR YOUR IMF REPORTS.

6. Financial development allows for better monitoring of managers of firms and corporations:

Information is also important to the operation of firms, particularly in publicly held corporations where it is difficult for shareholders to monitor and evaluate the actions of those who are running the corporation on a day-to-day basis.

Developed financial systems provide

- a) *Instantaneous stock pricing*
- b) *Current financial information*
- c) *Financial information agencies*
- d) *Credit rating agencies*
- e) *Other*

So, you can monitor the behavior of managers!

TAKE HOME: *Read the story of Fred (p.21/22), Ross Levine (1997).*

The Empirical Evidence on Financial Development and Growth

* King and Levine (1993) find a strong correlation across 77 countries between various indicators of bank development and both contemporary and future economic growth.

* Levine, Loayza and Beck (2000) update King and Levine's study using new methodologies and data and obtain same results.

See also

Aghion, Howitt and Mayer-Foulkes (2005)

Levine and Zervos (1998)

Demirgüç-Kunt and Maksimoviç (1996)

Rajan and Zingales (1998)

Beck *et al.* (2004)

Ramey and Ramey (1995)

Aghion *et al.* (2005)

Demirgüç-Kunt and Levine (1996)

CASE STUDY: Microfinance in Poor Countries

Microfinance is a generic term used to refer to programs that help provide small, uncollateralized loans, and services to the poor. Traditionally the funding comes from governments or philanthropic organizations.

The most successful of these is the *Grameen Bank* in Bangladesh which was founded *in 1976 by Dr. Muhammad Yunus* to provide loans to the poorest *Bangladeshis* who wanted to engage in business opportunities but who did not qualify for formal loans.

Grameen has distributed over *\$6 billion* in loans to those without access to reasonable credit. The average loan size is less than *\$200*.

Dr Yunus was awarded *a Nobel Peace Prize in 2006*. Nobel Committee said "had appeared to be an impossible idea".



**Remember to follow up
what's going to happen!**

Grameen defies order to dismiss Yunus, March 2 2011, FT
The bank founded by Muhammad Yunus, the Nobel Prize winning microfinance pioneer, has defied an order by Bangladesh's financial regulator to remove him from office.

Bangladesh High Court is expected to deliver its verdict tomorrow (March 7) on a petition by Nobel laureate and micro-financier Muhammad Yunus challenging the legality of a central bank order removing him as the chief of the Grameen Bank.

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The Four Primary Forms of Financial Intermediation

(1) Bond markets

Bonds are financial instruments with three characteristics:

- (a) the amount borrowed (the *principal*) is repaid at a fixed point in time (its *maturity date*)
- (b) Interest payments are made regularly at fixed points in time; and
- (c) Interest rate is fixed throughout the life of the bond (although floating or indexed rates available)

The Four Primary Forms of Financial Intermediation

(2) Stock markets

A *stock* (or *equity*) is a financial instrument that grants the holder a share of limited ownership of a corporation.

- (a) In the case of default stockholders cannot lose more than the price of the stock that they purchased.
- (b) They're entitled to get *dividends*.

The Four Primary Forms of Financial Intermediation

(3) Financial intermediaries

They are institutions that facilitate the transfer of money from small savers to borrowers. They take many forms.

- (a) Insurance companies
- (b) Mutual funds
- (c) Finance companies
- (d) Depository institutions
- (e) Savings and loans
- (f) Credit unions
- (g) Investment banks

The Four Primary Forms of Financial Intermediation

(4) The foreign exchange market

Foreign exchange is the trading of one currency for another currency, either at current (spot) prices or at fixed future prices. The foreign exchange market, like bond markets and some stock markets, has no physical location but is simply a network of currency traders representing major financial institutions, primarily international banks.

The foreign exchange (FX) market is by far the largest financial market in the world. In 2004, each day on average over \$2 trillion in trades are made in the FX market.

CASE STUDY: Which Forms of Financial Intermediation are Most Important and Why? An International Comparison

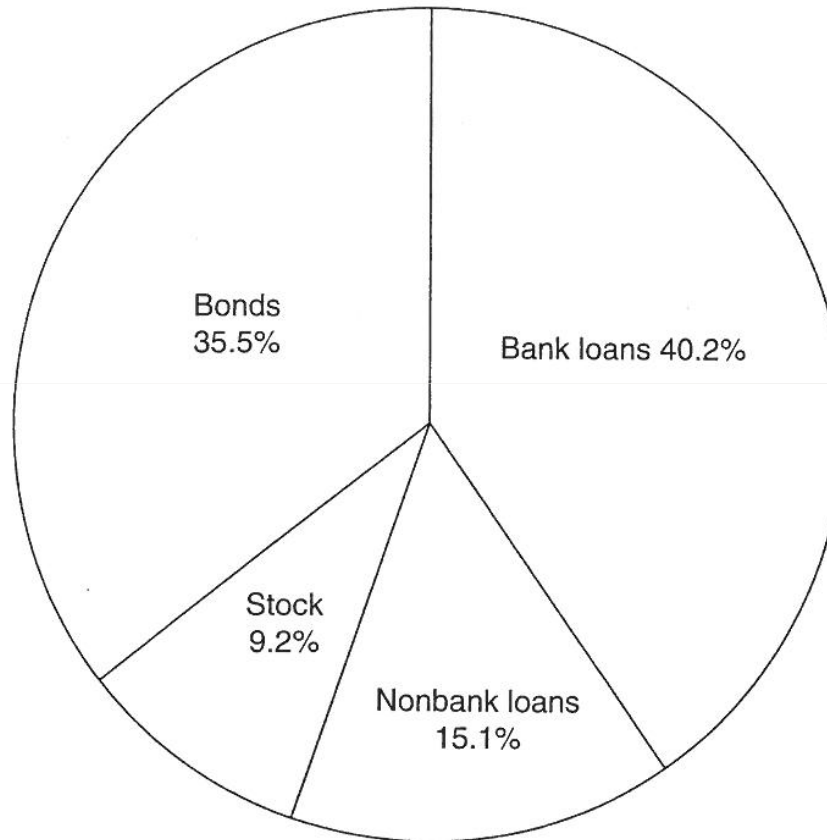


Figure 1.1
Sources of Finance for Nonfinancial Firms in the U.S.
Source: Schmidt, 2001.

CASE STUDY: Which Forms of Financial Intermediation are Most Important and Why? An International Comparison

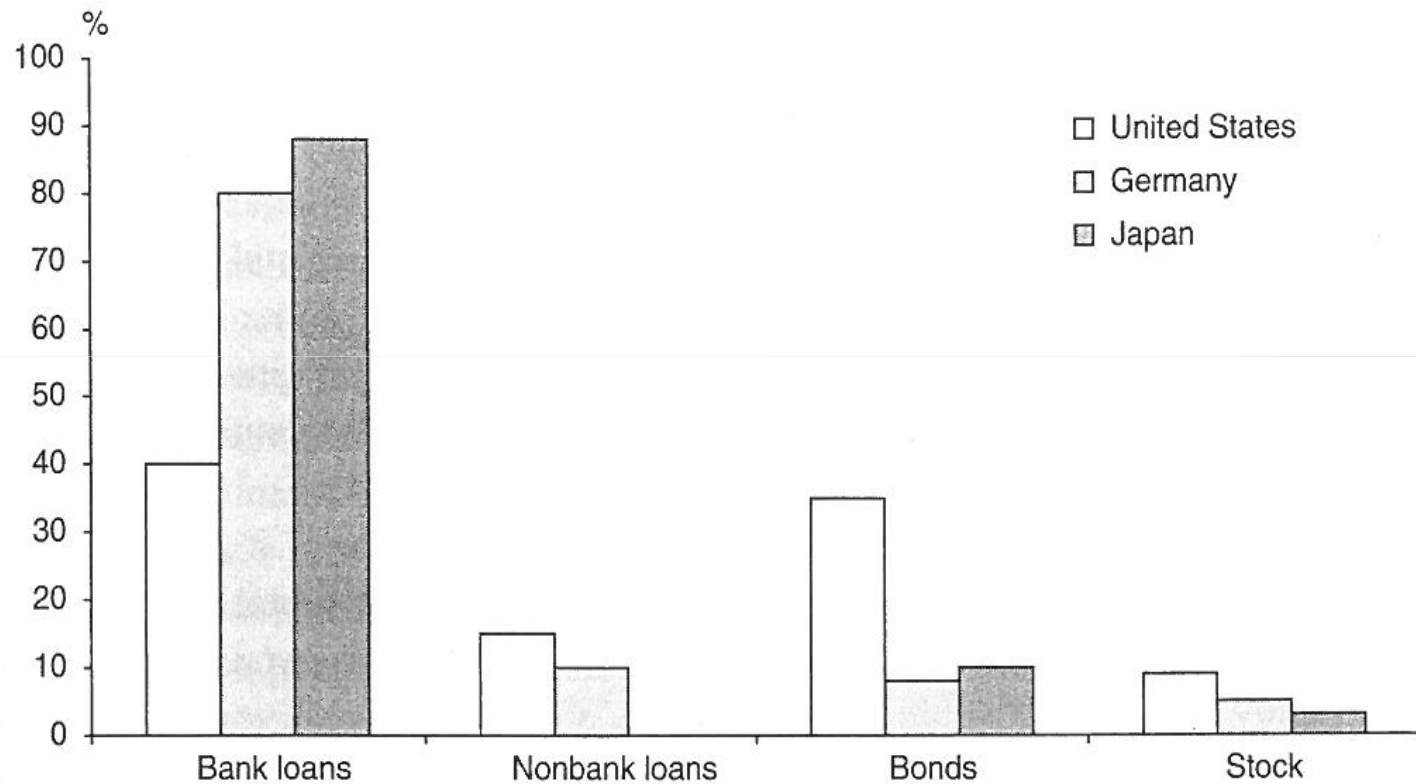


Figure 1.2

Sources of Finance for Nonfinancial Firms in the U.S., Germany, and Japan, 1970–1996.

Source: Schmidt, 2001.

CASE STUDY: Which Forms of Financial Intermediation are Most Important and Why? An International Comparison

Table 1.2 Size of Financial Intermediaries and Markets Relative to GDP (Averages for 1980–1995)

<i>Country</i>	<i>Stock Market Capitalization as a Percentage of GDP</i> (A)	<i>Outstanding Bond Issues as a Percentage of GDP</i> (B)	<i>Credit Extended by Banks and Other Financial Institutions as Percentage of GDP</i> (C)	<i>Ratio of Intermediate Finance to Financial Markets Finance</i> $C/(A + B)$ (D)
Industrialized countries				
France	19.8	41.2	90.9	1.5
Germany	18.6	37.4	92.3	1.6
Greece	8.1	4.3	40.2	3.2
Italy	11.9	28.1	50.5	1.3
Japan	73.0	30.0	169.3	1.6
United Kingdom	76.3	14.4	74.4	0.8
United States	58.2	52.6	130.7	1.2
Emerging market countries				
Argentina	4.8	5.9	15.0	1.4
Brazil	11.9	4.0	24.7	1.6
India	13.2	5.7	26.8	1.4

Source: Cecchetti (2006).

CASE STUDY:

Financial Systems in India and China

TAKE HOME:

Read and update figures of India and China!

Conclusions:

Let's re-visit the slides!

EVENT(S) OF THE WEEK

Resign of **Howard Davies**, Head of LSE!

Who will be the next leader of China?

Xi Jinping, the man slated to be the next president, and **Li Keqiang**, the likely next premier

Rajat Gupta, a former **Goldman Sachs Group Inc. (GS)** director, and **Raj Rajaratnam's** brother, **Rengan**, each conspired in insider trading with the **Galleon Group** LLC co- founder.

DOW

12169.90 -88.32 (-0.72%)

S&P 500

1321.15 -9.82 (-0.74%)

NASDAQ

2784.67 -14.07 (-0.50%)

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END of CHAPTER-1

Next Week

- A Brief History of Financial Development
- Central Banks and Modern Central Banking
- Capital Flows
- Globalisation
- The Housing Market, Mortgages, and Securitization
- Hedge Funds

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