

# 1. The Four Prices of Money

## Welcome

Syllabus handout, release handout

## Texts:

Lecture Notes on Courseworks, soon after each lecture

Stigum

--a practitioner's view of the money markets, recently updated

Reading Packet on Courseworks, already there

--wide range of perspectives, views

Frydman or Barofsky

--reading period assignment, opportunity to integrate, connect

Financial Times

<http://ineteconomics.org/blog/money-view>

## Big Picture:

This course builds on **my own background** in the history of monetary economics and financial economics, as developed in my first two books, The Money Interest and the Public Interest, American Monetary Thought 1920-1970 and Fischer Black and the Revolutionary Idea of Finance. I locate myself in the distinctly American tradition of monetary thought that stretches from Allyn Young to Alvin Hansen, Ed Shaw, and Hyman Minsky, all of whom engage in one way or another with the great tradition of British central banking thought that stretches from Walter Bagehot to Ralph Hawtrey, Richard Sidney Sayers, and Charles Goodhart. I have included the writings of some of them in the reading list to introduce you to these traditions.

But this course is not about that past development. It is quite emphatically a course about the present, and indeed about the emerging future. It is a course about money in a world of **financial globalization**. The history of monetary and financial thought is a story about how each generation had to rethink the underlying issues for themselves in order to make sense of the conditions of their own time. So do we today. Our task is to work out the implications of financial globalization for how we understand money, banking, and central banking.

To do that we start not so much with the tools of economics but rather with the testimony of practical bankers themselves, whose business requires them to work out the implications of a changing world for their own practice. One thing that my historical studies have taught me is that the origins of monetary thought lie in **concrete banking practice**. There have always been some practitioners who respond to an inner urge to write down what they know in the form of a manual to teach others. Today these people can be found at central banks, the BIS and IMF, and also inside the global banking system that comprises the infrastructure of financial globalization. We will be reading and taking seriously these voices, but always with an idea to extract from them some nuggets of wisdom we can translate into economics.

**Teaching Assistants** will be helping us with that translation

Discussion sections: weekly, on the reading for the week

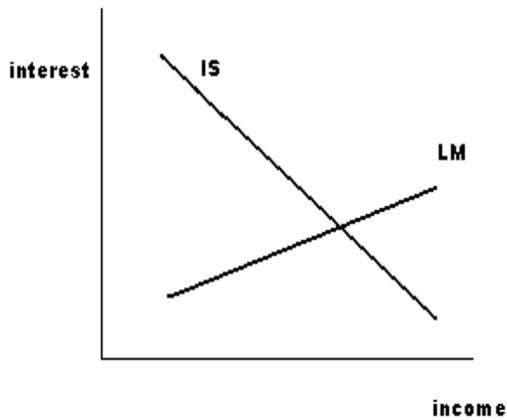
Problem Sets: balance sheets, repo math, dealer economics, international money, derivatives

Exams--dates, style (analytical distinctions, T/F, identifications)

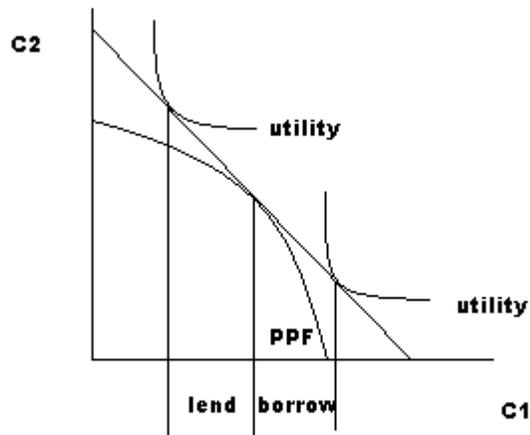
### Prerequisites and Math

**Intermediate Macro and Micro** required for economics majors. What does that mean?

Macro means IS/LM—macro story about nominal interest rate  
--the Fed, Taylor Rule, DSGE



Micro means Fisher diagram—micro story about real interest rate, slope of budget line= $-1/(1+r)$



It is possible to teach money and banking as a course in applied macro, or applied micro.  
 Applied economic theory emphasis:

- micro, banks as firms, intermediation because of asymmetric info
- macro, foundations of the LM curve, money demand and supply
- monetary policy, credit channel and money channel

We will not however be making much explicit use of these analytical constructs until the end of the course. As I say, we will be listening to bankers, trying to build up our own sense of the system inductively.

The analytical backbone of the course is an accounting model, both micro and macro. For now it is sufficient to start with micro, and thinking of every agent in the economy as a kind of bank, in the sense that every agent needs to be attending to the daily inflow and outflow of cash balances. Every agent has to worry about this, but only actual banks make a business out of worrying about it. What is a bank?

Bank

Assets	Liabilities
Loans	Deposit Accounts
Securities	Other borrowing
Cash Reserves	Net Worth

Issue of Solvency vs. liquidity, issue of monetary control

“Shadow Bank”

Assets	Liabilities
Mortgage Backed Security Tranche	Money Market Borrowing
Interest Rate Swap	Repurchase agreement
Credit Default Swap	Asset Backed Commercial Paper
	Auction Rate Securities
	Eurodollar Borrowing

Issue of solvency vs. liquidity, issue of monetary control

Central Bank is also a Bank, at a higher level:

<http://www.federalreserve.gov/releases/h41/Current/h41.pdf>

Issue of solvency vs. liquidity, issue of monetary control

Centrality of the issue of liquidity—that is what makes banks special and different from other corporations.

## Syllabus overview

A course in banking phenomena, not banks as legally defined institutions.

### Four **functions** of banking

Clearing, market making, advance clearing, intermediation

I believe that understanding the payments system is the best starting place for understanding the phenomenon of liquidity. Once we understand the phenomenon of liquid assets we are ready to consider the phenomenon of liquid markets. Thus clearing and market making are the two central functions that we will be concerned about before the midterm.

### Four **prices** of money

Par—different types of money (currency, deposits)

Interest—future money (fed funds, Eurodollars, repo)

Exchange rate—foreign money

Price level—commodities

## Financial Globalization Redux

Why don't I just teach the standard stuff?

The world has changed, and even the best textbooks lag behind. Existing theory was developed to explain a very different world: postwar (govt debt) and post Depression (govt guarantees, regulation). This led to emphasis on intermediation story, and monetary policy story. Today we live in a different world. Private financial markets, and globalization, are the key facts of our time. Practical central bankers know this better than academic economists, and traders in the money markets know this best of all.

In terms of **globalization** (trade and integration), the current world is more similar to the pre-WWI world than the post-WWII world, the world when the pound sterling was king and the Bank of England operated as central bank for the entire world. Longer history thus gives more perspective on our current situation than does more recent history. Bagehot helps us more than Irving Fisher.

In terms of **finance**, the current world is in many ways new. There are new financial instruments, much more wide usage of existing instruments, electronics and telecommunications, and new theories. This is not a course about finance, but it is deeply informed by finance practice, and also finance theory. The strong finance view (such as Fischer Black) says there should be no separate theory of money, that liquidity is a free good in efficient markets. Obviously this is a strong challenge to a course like this one, and I don't think the standard economics view offers a very adequate response. For me, the place where money meets finance is in a kind of financial derivative called a swap since all banking is essentially a swap of IOUs.

Next week:

Lectures 2 and 3: Natural hierarchy, Monetary history

Reading: Young, prof at Harvard, American institutionalist, chapters in an encyclopedia written in 1920s, new Fed, end of Sterling hegemony. Read it once over the weekend and then again after next week lectures and discussion section.