Commercial Banks (CBs)

M+B 4

Checking accounts serve as Money

In US, Checking Accts are created by privately owned banks and thrifts.

What serves as M?

"The pivotal issue, then, is not whether you respond to my needs by cash or by check but for how much."

The Monetary Aggregates
(5/09, $ billions, s.a.)

Official M1:			
Currency in circulation		849.8	(53.2%)
Checkable Deposits (excl Sweep Accts)		741.0	(46.4%)
Demand Deposits	406.6		
Other (NOW etc)	334.4		
Non-Bank traveler's checks		5.2	(0.3%)
Total M1		**1,596.0**	
M1-S (Unofficially computed for this course):			
Currency in circulation		849.8	(35.5%)
Checkable Deposits (incl Sweep Accts)		1,536.2	(64.2%)
Official	741.0		
Sweep Accts (est.)	795.2		
Non-Bank traveller's checks		5.2	(0.2%)
Total M1-S		**2,391.2**	
M2:			
M1		1,596.0	
Savings Deposits (incl. MMDA)		4,445.0	
Small time deposits		1,307.3	
Retail Money Market Mutual Funds		979.2	
Total M2		**8,326.6**	
MZM (Zero-Maturity M, computed by St. Louis Fed per Wm. Poole):			
M1		1,596.0	
Savings Deposits (incl MMDA)		4,445.0	
All Money Market Mutual Funds		3,517.6	
Retail	979.2		
Institution-only	2,538.4		
Total MZM		**9,558.6**	

MMDA = Money Market Deposit Account, a Bank/Thrift liability.
MMMF = Money Market Mutual Fund, *not* a Bank/Thrift liability.

Data sources: *Federal Reserve Statistical Release H.6*; St. Louis Fed (http://research.stlouisfed.org/aggreg/swdata.html) for estimated Sweep Accounts.

Commercial Bank Assets and Liabilities
All Commercial Banks in the U.S.
Sept, 2002
(billions of dollars)

Assets

	Cash Reserves		38.9
	Vault Cash	30.2	
	Balances w/ Fed	8.7	
	Other Cash Assets		278.3
	Fed Funds Sold		325.9
	Debt Securities		1,642.3
	Loans		4,086.7
	Other Assets		415.9
A =	Total Assets		6,788.0

Liabilities & Net Worth

	Checkable Deposits		584.0	in M1
	Demand Deposits	292.4		
	NOW Accounts	291.6		
	Savings Deposits		2,187.8	in M2
	Passbook Savings, MMDA (incl sweeps)			
	Time Deposits (CDs)			
	Small		657.4	
	Large		1,701.4	in M3
	Fed Funds Purchased		527.7	
	Other Liabilities		1,329.1	
L =	Total Liabilites		6,330.0	
	Net Worth = A - L		460.0	
	Liabilities + NW		6,788.0	

CB Liabilities

Checkable Deposits

1. Traditional Demand Deposits

May not pay interest since 1933

Only held by CBs

2. Other Checkable Deposits (OCD)

Mostly NOW Accts.

Negotiable Order of Withdrawal

May pay interest

Held by CBs or Thrifts

Authorized nationally by 1980 DIDMCA

Non-Business only

- Same reserve requirements by 1980 DIDMCA

DIDMCA

"Didmik"

Depository Institutions Deregulation & Monetary Control Act of 1980

- Permitted banks, thrifts to offer NOW accts.
- Set uniform reserve requirements for all banks, thrifts.
- Phased out deposit interest ceilings

Near-Moneys

1. Passbook Savings Deposits

- Fixed present value.
- Interest accumulates
- No checking
- Pre-1970's, only non DD type of Bank Deposit.

2. Small Time Deposits (< $100,000) or Certificate of Deposit CD

- Fixed Maturity
- Penalty for early withdrawal
- 1970's innovation
- in M2 if < $100,000
- in M3 if ≥ $100,000

3. Money Market Mutual Funds
MMMF

Not a Bank or Thrift Liability

Set up as Mutual Fund

Reg. By S.E.C.

Holds only short term marketable debt instruments.

- Bank CD's. (> $100,000)
- Corp. Commercial Paper (CP)
- Treasury Bills

⇒ stable share value, most "Penny-Round", depositors bear residual P.V. Risk.*

Allow limited checking through a C.B.

*Until 9/08

Early 1970's innovation

In M2 if Retail, M3 if Inst. only

Not Federally insured*, yet safe

Sept 2008 developments with MMMFs:

- CP Ratings
  - P-1 – Safest
  - P-2 – Moderately risky

- Some MMMFs enhanced yields with P-2 CP, since T-Bills, P-1 yields near 0.

- Summer 08 – P-2 CP fell to a yield discount of ~5%/yr rel. to P-1 paper, T-Bills.

- Sept. 08 –
  Primary Reserve Fund (a MMMF) "broke buck"
  ie market value of portfolio fell more than ½%, so couldn't "penny round" to $1.00
  in fact, fell to 97¢/$.

- → Treasury, Fed moved to support P-2 CP market to prevent negative returns on high-risk MMMFs.

- Makes no more sense than protecting stock Funds from neg. daily returns!

4. Money Market Deposit Accts. (MMDA)

- Pay interest – No ceiling since inception in 1983
- No reserve requirements since 1/91
- Limited checking. 6/month.
- Fixed present value like Savings, Checking.
- General liability of issuing CB or Thrift, unlike MMMF.
- Federally insured. (FDIC)
- Authorized by 1982 Garn-St Germaine Act.
  - to compete with MMMF
  - effective 1/83
    → MMMF ↓ 25% immediately without incident

5. Sweep Accts

- MMDA balances that act as unlimited checking accts
- Now half of all checking accts.
- In M1-S, M2, <u>not M1!</u>
- Important since 1995
- More next class.

Fractional Reserve Banking

Cash Reserves = 38.9 B "R"
9/02

Checkable Dep. = 1108 B "D"
Incl est. Sweeps

$$f = \frac{R}{D} = 3.5\%$$

2. Other assets less liquid.

⇒ potential illiquidity problem

1. Banks make 0 interest on Reserves.*

⇒ have incentive to keep R low.

* Until 10/2008

Fed now pays i on excess reserves (only).

Reserve Requirements

Vault cash or Deposits with F.R.S.
Earn 0 interest.

- Set by FRB within limits set by Congress
- Applies to all Checkable Deposits "D", by size of bank

1999:

First $4.9 M of "D"	0%
$4.9 M – $46.5 M	3%
$46.5 M up	10% *

Favors small banks.

* 12% before 4/92

: Time, Savings deposits – 0% since 1/91

Commercial Bank Assets, 9/93

Loans	62%
<u>Unsecuritized loans</u>	
• Customer relationship	
• Less marketable, less liquid	
• Higher interest rates	
Securities	24%
<u>Securitized loans</u> (not equities)	
• Bonds, Bills, Commercial Paper	
• More marketable, more liquid	
• Lower interest rates	
Cash Reserves	2%
Other Cash Assets	4%
Other Assets	8%

Commercial Bank Loans by Type, 3/93

Real Estate	46%
Commercial & Industrial	24%
Personal Incl. Auto, Credit Card	20%
Stock Market Margin Requirement set by Fed (currently 50%)	4%
Agricultural Production	2%
Other	4%

Prime Rate

Interest rate banks charge "Prime Customers".

Below-Prime discounting is common since 1980s.

Many variable rate loans, lines of credit tied to prime rate.

Bank loans far exceed monetary deposits.

Financial Intermediation (F.I.)

When banks fund loans with CDs, they act as Financial Intermediaries.

- Important, but non-monetary function of banks.
- No illiquidity risk or interest rate risk if CDs have same maturities as corresponding loans.
- More in Ch. 27.

"Near Moneys"

Passbook Savings, MMDA

- 0 maturity
- MMDAs have limited checking
- Gray area between money, Financial Intermediation.

Federal Funds Market

Fed Funds

Funds on deposit w/ Fed
used as clearing balances
count as legal reserves

Fed Funds Rate

Rate banks charge each other
for use of Fed Funds
overnight or short-term

		9/02
	FF "purchased" (L) = borrowed	$528 B
−	FF "sold" (A) = lent	− $326 B
=	**Non Bank Repos:**	$202 B

Nonbank Repurchase Agreements (Repos)

Overnight or term (several days) collateralized by overnight sale of T-Security

- Nonbank ⟺ Bank – in M3
- Nonbank ⟺ Nonbank – No M implications
- Nonbank ⟺ Fed – source of M Base

Very close substitute for Interbank Fed Funds transactions.

Fed participates in Nonbank Repo market.

Indirectly but powerfully affects FF Rate.

Net Worth
(Capital Accounts)

$NW = A - L$

Balance sheet identity:

$$\boxed{A \equiv L + NW}$$

Solvent if $NW > 0$

Insolvent if $NW < 0$

NW protects Depositors, FDIC
against losses on Assets

NW = equity interest of banks' shareholders.

$NW/A = 6.8\%$ 12/02

$A/NW =$ "Leverage" – M+B5

$= 14.7:1$ 12/02

Federal Deposit Insurance

FDIC

= Federal Deposit Insurance Corp.

- Founded 1935
- Insures depositors

  to $250,000 per depositor per bank.

  Since 10/08

  $100,000 previously, since 1982

Glass - Steagall Act 1933

Separated Commercial Banks
from Investment Banks.

CBs —
hold Deposits
make Loans
do not underwrite new securities
Federally Insured

IBs —
No Deposits
Underwrite new security issues.
— high risk
Not Federally Insured,

Repealed 1999 — Gramm Leach Bliley Bill.

- Bank Holding Co's (like Citigroup) may now own both CB's (like Citibank), IB.
- CB subsidiaries are still separately incorporated, but may be induced to make risky, undiversified loans to I.B.
- "Firewalls" are supposed to prevent this.