

# Monetary and Financial Architectures

Fiat Lux – Freshmen Seminar

Prof. Saki Bigio

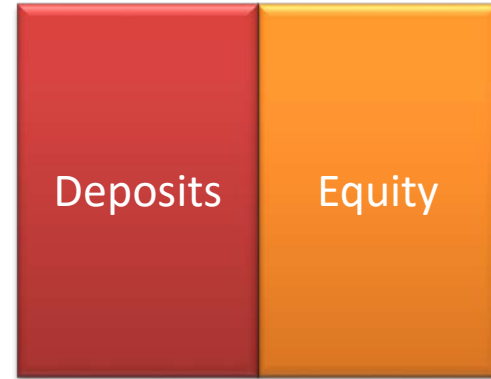
# Traditional Banking

## What do banks do?

Borrower



Saver

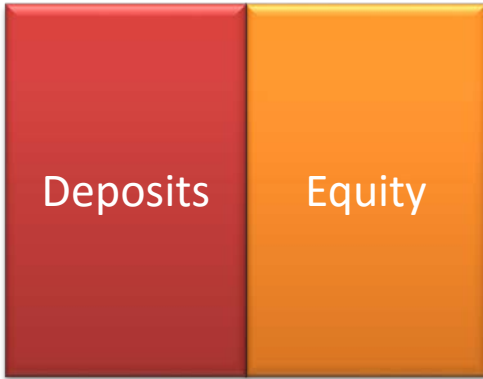


Bank



# Shadow Banking

Saver



MMF/SBD

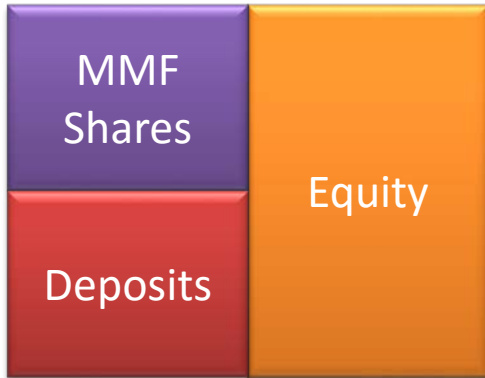
Bank



SIV/Conduit/SBD

# Step #1: Creation of MMF

### Saver



### MMF/SBD



### Bank

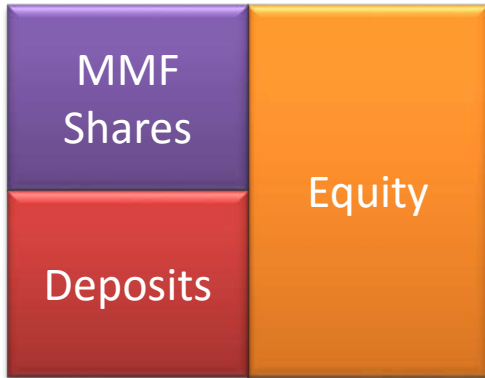


### SIV/Conduit/SBD

# Step #2: Creation of Off-Balance Sheet Institutions



### Saver



### MMF/SBD



### Bank

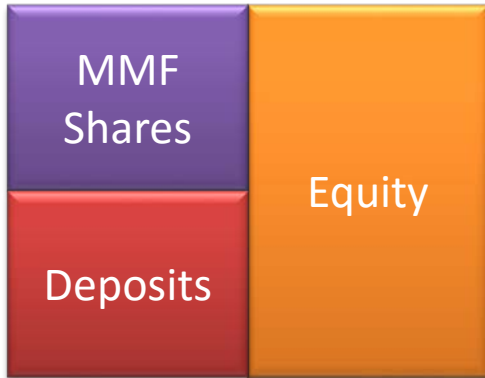


### SIV/Conduit/SBD



# Step #3: Securitization

### Saver



### MMF/SBD



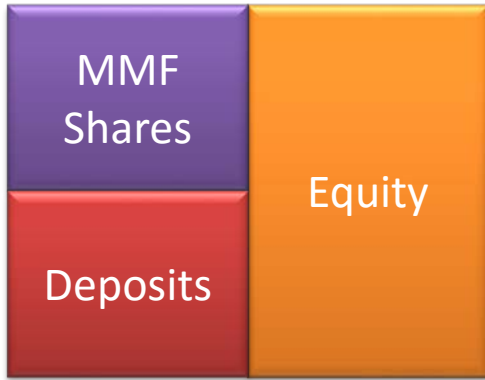
### Bank



### SIV/Conduit/SBD



### Saver



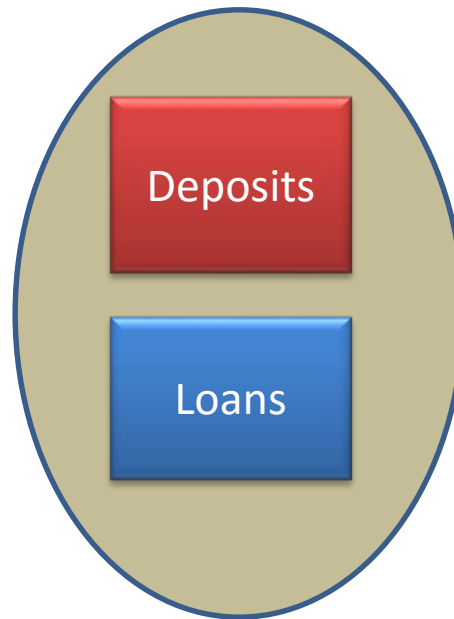
### MMF/SBD



### Bank



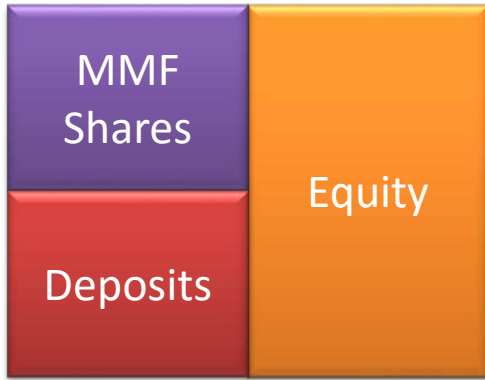
### Packaging



### SIV/Conduit/SBD



### Saver

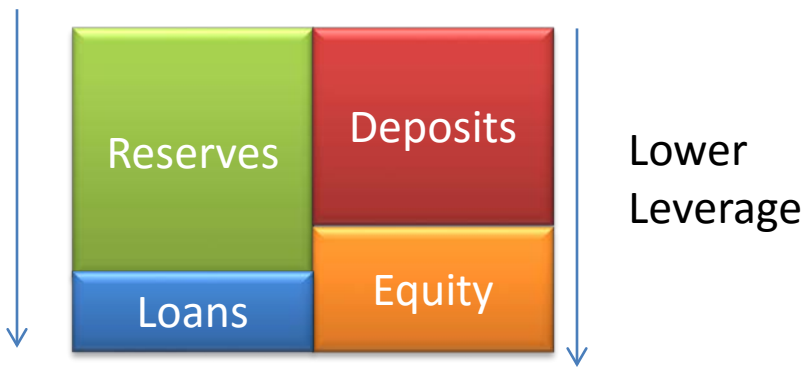


### MMF/SBD



Higher  
Liquidity  
Ratio

### Bank



Lower  
Leverage

### SIV/Conduit/SBD



Problems

### Borrower



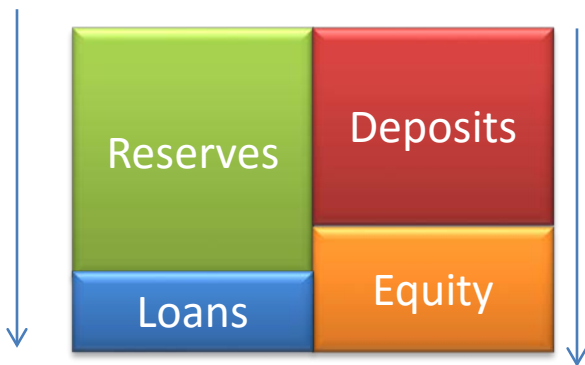
### MMF/SBD



Lower  
Leverage

Higher  
Liquidity  
Ratio

### Bank



### SIV/Conduit/SBD



### Borrower



### MMF/SBD



Non-Performing

Lower Leverage

### SIV/Conduit/SBD





# Borrower



# MMF/SBD

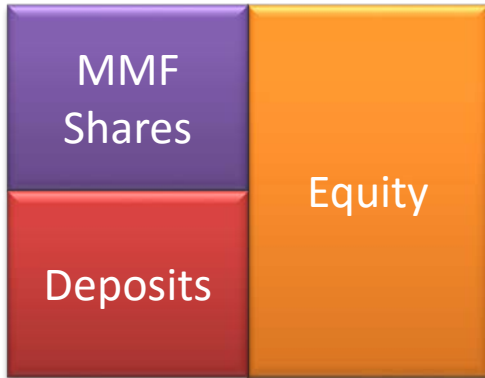


Run on the REPO  
Collapse in ABCP

# SIV/Conduit/SBD



Saver



Run on MMF

MMF/SBD



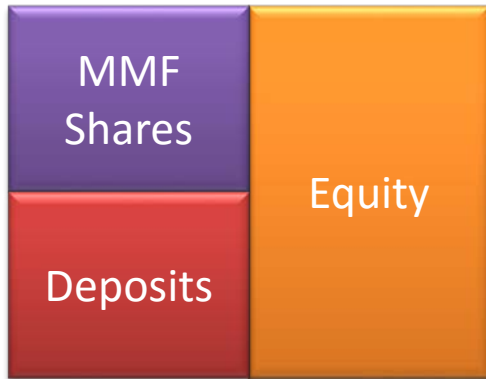
Run on the REPO  
Collapse in ABCP

SIV/Conduit/SBD



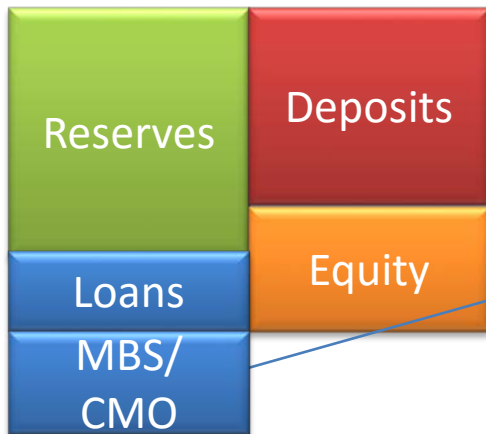
# Step #4: Reversals

Saver



Run on MMF

MMF/SBD



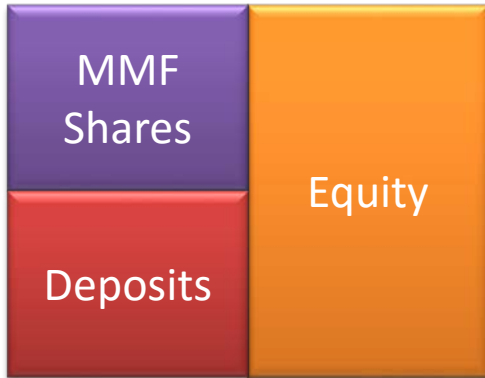
Repurchase of MBS by Banks

SIV/Conduit/SBD

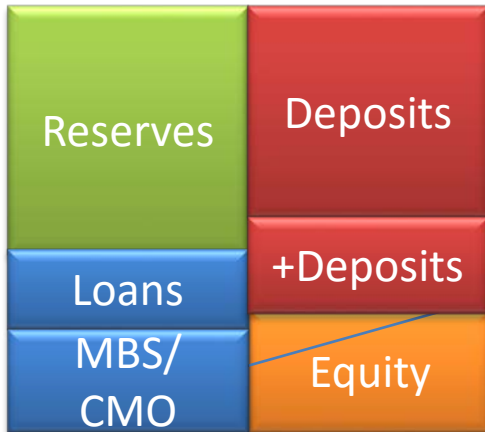


Saver

MMF/SBD



Run on MMF



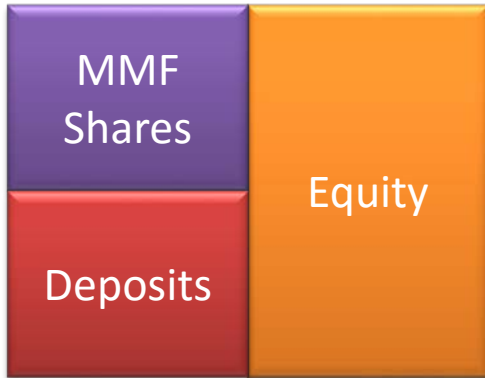
Repurchase of MBS by Banks

SIV/Conduit/SBD



Saver

MMF/SBD



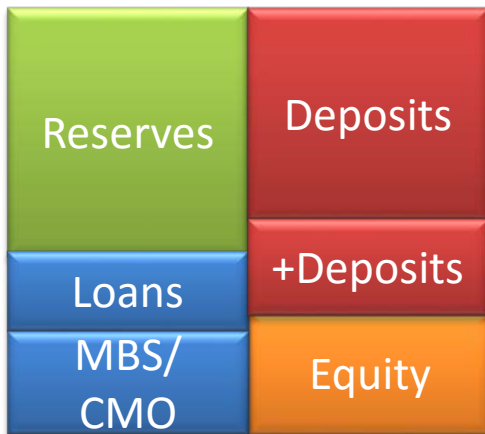
Run on MMF



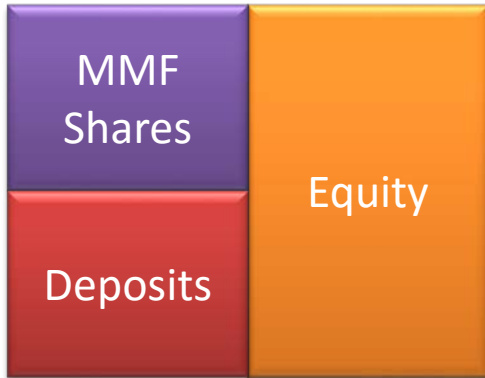
Liquidation of SIV



SIV/Conduit/SBD

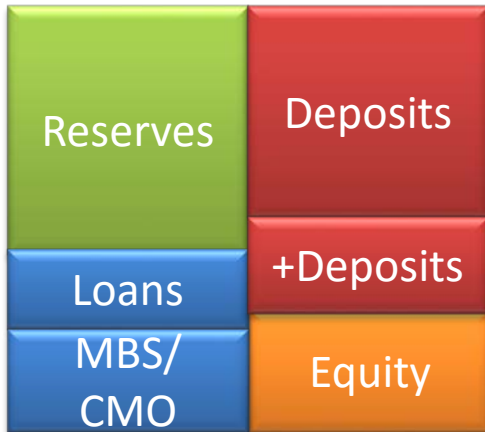


Saver



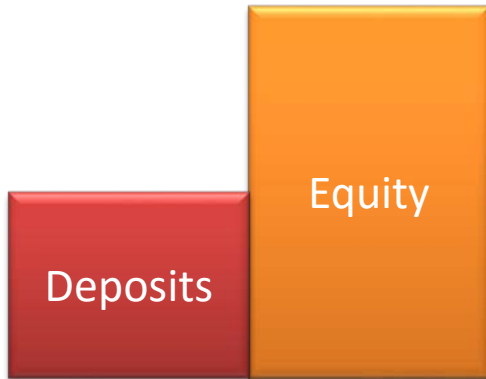
Run on MMF

MMF/SBD



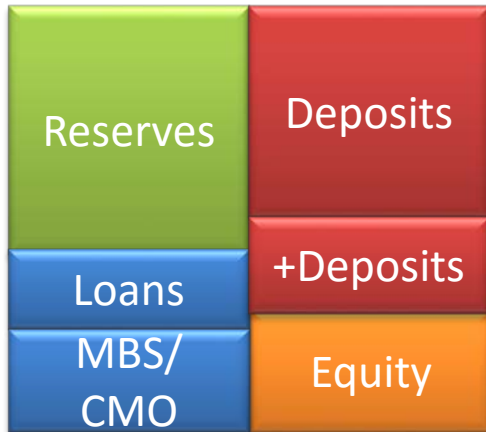
SIV/Conduit/SBD

Saver



MMF/SBD

Liquidation of MMF

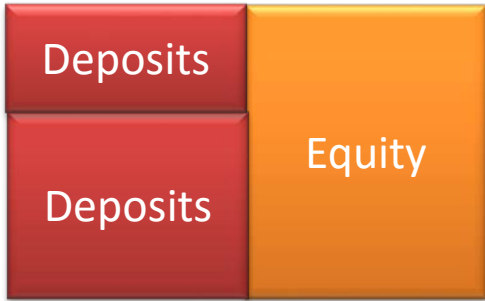


SIV/Conduit/SBD



Saver

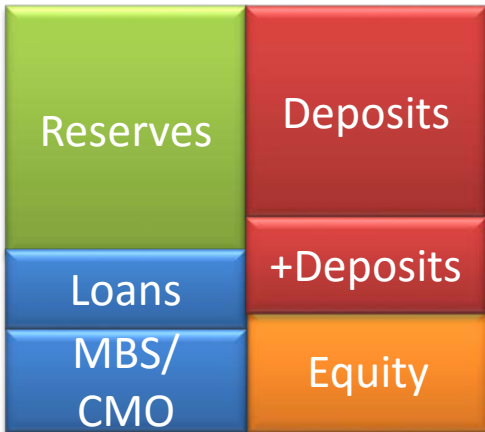
MMF/SBD



Equity Losses



SIV/Conduit/SBD



Increase in Deposits



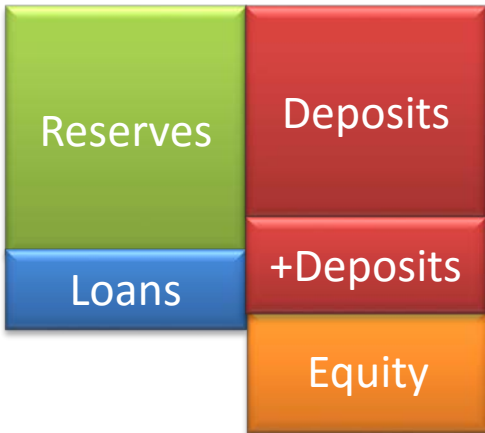
**Step #5: FED**

Saver

MMF/SBD



Equity Losses



Increase in Deposits



FED



### Saver

Deposits	Equity
Deposits	

### MMF/SBD

Reserves	Deposits
+Reserves	+Deposits
Loans	Equity

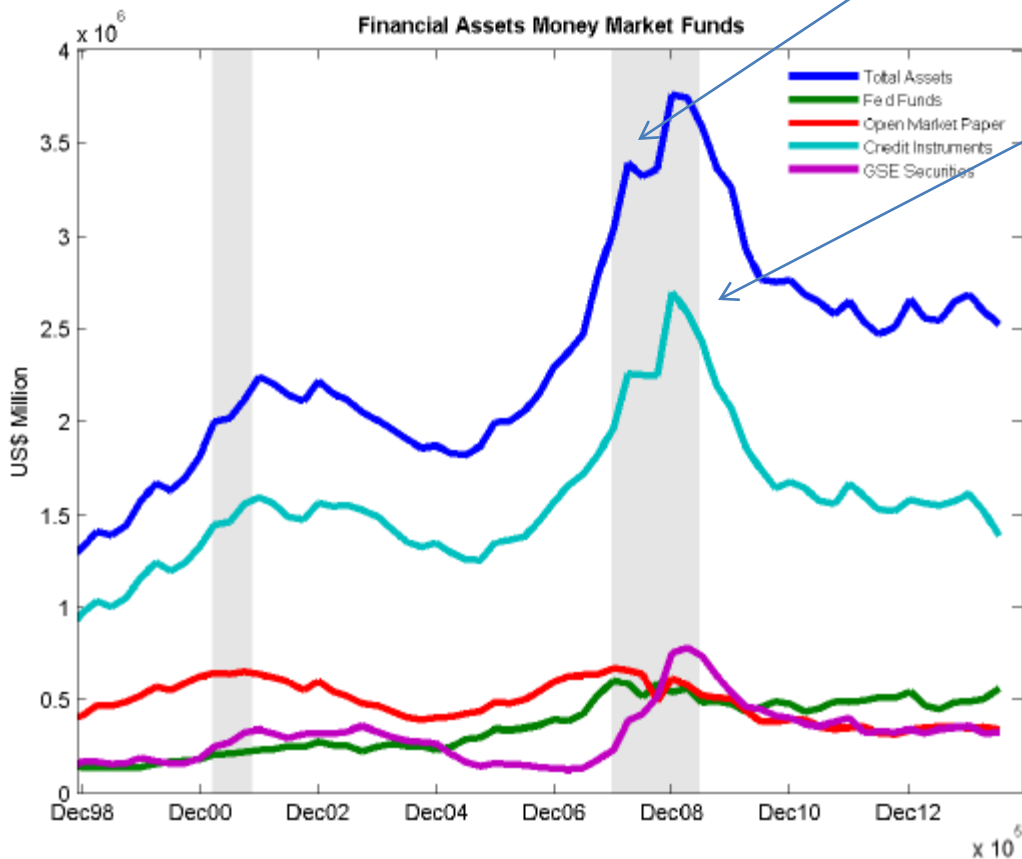
FED Balance Sheet

### FED

T-Bills	Reserves
MBS/ CMO	+Reserves

# Money Market Fund Assets

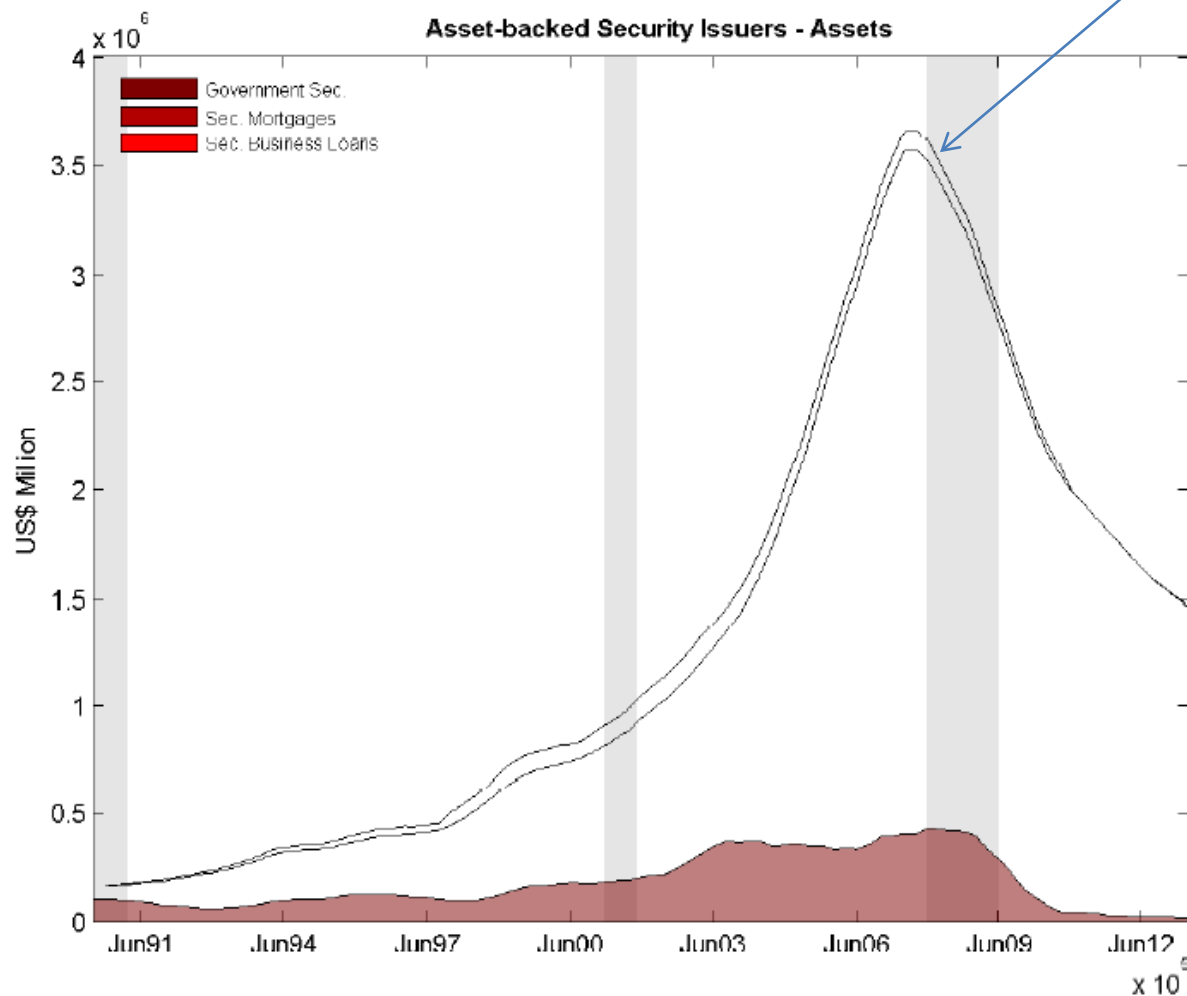
Why? Mutual Funds dumping? CP/REPO



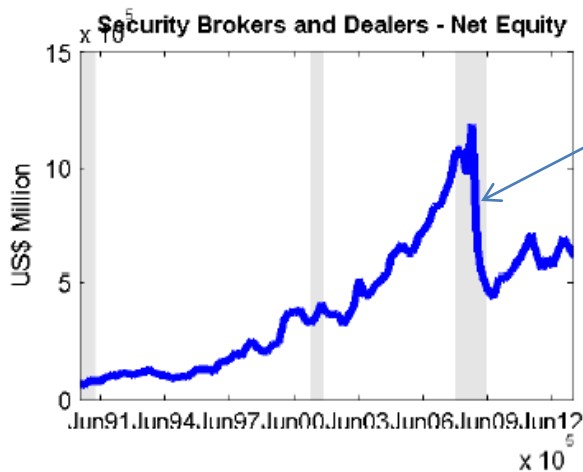
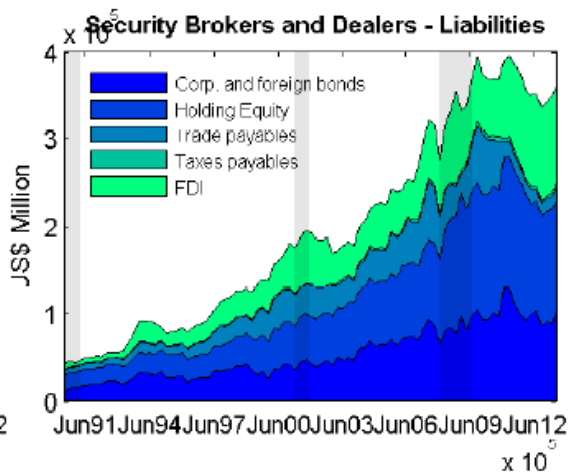
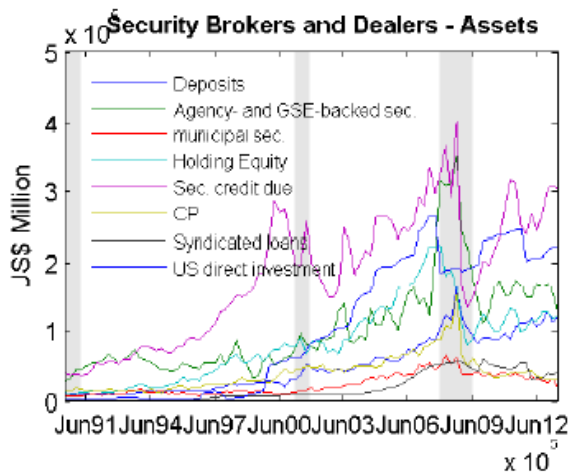
Lions Share:  
REPO+CP  
-1 Trillion

# ABS - Issuers

Lions Share:  
REPO+CP  
-2.5 Trillion

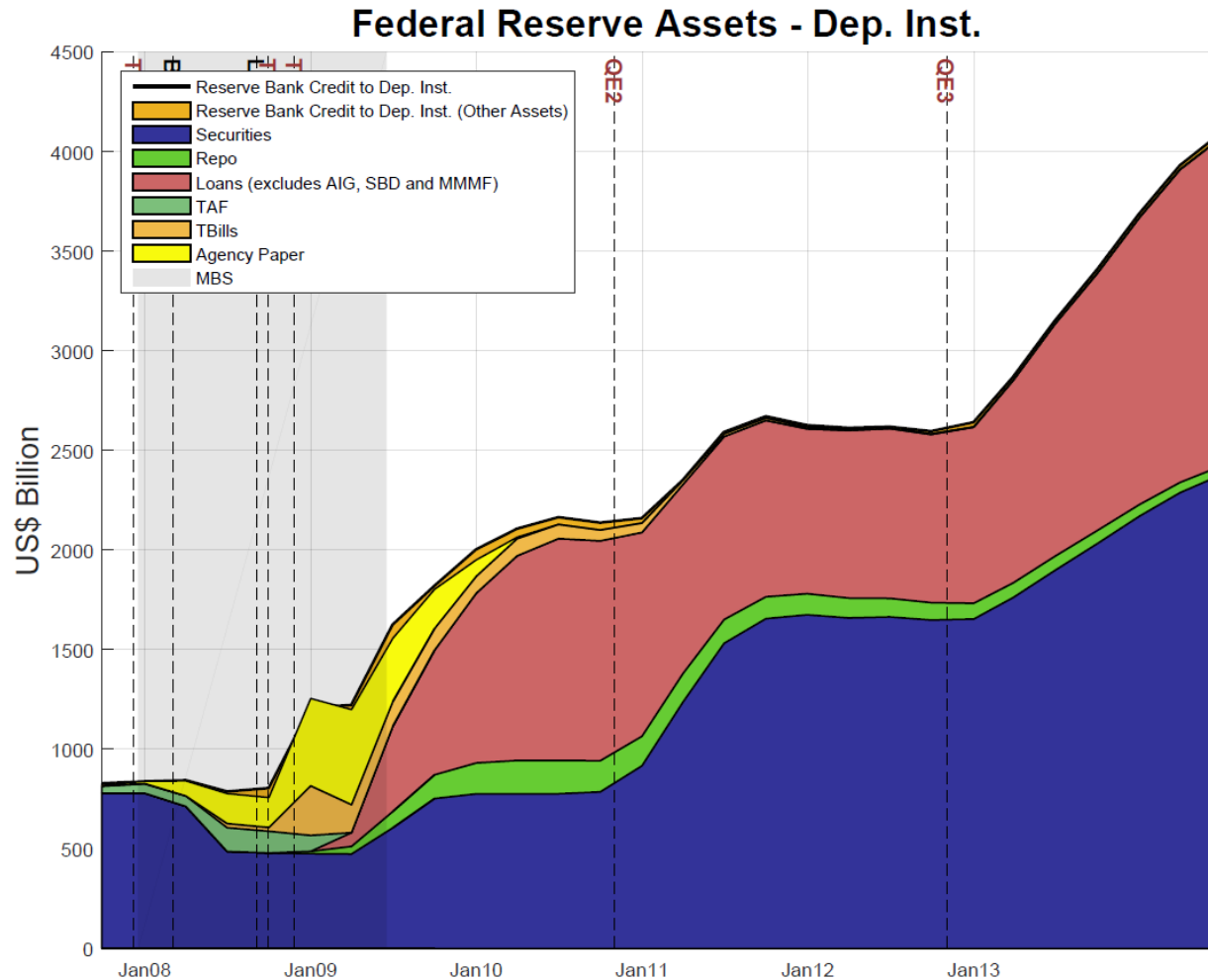


# Security-Broker + Deales (Investment Banks (not done yet...))



Goldman becoming Bank

# Federal Reserve Balance Sheet





# Federal Reserve bought a lot of assets

