Commercial Banks

Core Attributes:

Reserves – amount of cash a cBank actually holds on site

Assets – reserves and loan balances to iBanks and net worth

Liabilities – consumer deposits

Consumers – HashMap of Consumers and their account balances

loansToIB – HashMap of loanId’s and loans to iBanks.

loanRate – annual interest rate to iBanks

loanYears – term of all mortgages to iBanks

annualSavingsYield – annual interest rate paid to Consumers, compounded monthly.

cBanks create loans for iBanks as long as the cBank has enough in reserves to cover the balance requested. The cBank goes bankrupt if it does not have enough in reserves to cover Consumer withdrawals. cBanks call in full loan payments if they ever reach a liquidity issue (reserves < withdrawal requested).

Interactions Handled:

Interest paid on Consumer accounts is handled here.

cBanks only create loans in response to iBanks which only create loans in response to firms. Hence firms generate the loanId’s, balances, and payments.

cBanks only receive loan payments when LoanFromCB objects have payments made upon them.

cBanks will force iBanks to pay loan balances in full in event that cBank does not have enough reserves to meet a withdrawal request.

Upon Bankruptcy, cBanks call removeAllConsumers() which sets into motion the cBank and all of its Consumers removing references between each other.

Scheduled Methods:

cBanks do not have any true scheduled methods because all needed actions are called by other modules. However, the cBank pays interest on all Consumer accounts at the end of each tick. These payments are made before Consumers attempt to access their accounts.